

This Is My Life
by Clyde Thorpe

THIS IS THE SEVENTH COPPY OF
* THE LIFE STORY OF CLYDE ALONZO THORPE *
AS WRITEN BY HIMSELF, AT THE AGE OF NINTY YEARS.
THIS COPPY WAS FINISHED, NOVEMBER THE FIRST 1958.

New Orleans La. November the fourth.

Dear Ralph and Henen;

Just a fiew lines, to inclose with the book.

I received Hellons letter, and am glad to know, U.B. is some better, and hope he will be alright again soon.

I have been quite busy, lately, which I do not mind, when the weather is nice, but today I must go to the club, and tomarrow, to the crippled childrens home, to help with the mailing of Holloween and Christmas seale, and it is a nasty day.

To get to the Childrens Hospital, I must take the west end bus, transfer to the Metairie bus, then to the Louisiana bus, and finally, to the Tchoupitouls (pronounced Chapitulis) and it requires one hour and ten minutes, to make the trip, one way. There are several of our members go there. and the other Groups, also send mambers. Some of us go in the morning, and some in the afternoon, and there are members working every day in the week, axcept Sunday.

I am able to address envelopes to the people in about four blocks of the doan-town district, in the three hours I work, so you can see, it is a big job. but worthy. In Ralphs letter, he spoke of the good qualities of the Golden Age Club. It seems that New Orleans has started something. There is a National orgenization, just been completed, and NORD received a letter from Minneapolis, asking for instructions as to how, best to organise a Club there.

I want to tell you folk, there are many mistakes, in my book, partly because of my inability to typr properly, and partly because of my carless spelling.

I apologize, for both, in advance. Tell U.B. I am thinking about him, and pulling, all the time.

You know, I am absurdly healthy, and hope to stay that way, but am not taking any chances, or exposing myself to bad weather.

Love to all, Clyde.

* THIS IS MY LIFE *

Written by Clyde A. Thorpe.

I am writing this story from memory, except, some of the birth dates, of which I have a record. Consequently, there may be some errors but for the most part, I believe it to be, substantially correct.

I have a remarkable memory of events that occurred far in the past, but become somewhat hazy, concerning more recent events.

Names and places far in the past, are still very fresh in my memory. I remember quite well, when the location which is now, the Town of Conrad, was just four corners, on the road to Marshalltown. There was a cemetery on the south-west corner, that was moved two miles west, when the Chicago and North-western Railroad came through and established the Town of Conrad. I must have been, four or five years old, at the time. I have never been arrested. I have never been called for Jury duty. I have never been called as a witness, in a Court of law, except as an expert witness, in cases concerning machinery. I guess, I have been lucky.

I have never lived in a community, it was not a pleasure to re-visit.

My past employers have seemed more like associates, than bosses, with very few exceptions.

I can give all the names of the people who lived in the neighborhood of my childhood, although, most of them have passed away, long ago.

The location of places and homes, are as fresh in my mind, as though I were looking at a diagram of the old neighborhood.

My work, as an Engineer, has taken me to many places, and I will endeavor to tell of those places, and the things that occurred, while I was there.

To those places, and the many friends I made while there, I dedicate this story.

2.

The question of who I am, and where my ancestors came from, I will answer, to the best of my ability. My Father, was Monroe Thorpe (christianed, William Monroe)

He was born in Buffalo New York, in 1835, I do not know the exact date. He was the youngest child, of William Thorpe, and Alvira (Hoak) Thorpe. He had four Brothers and two Sisters. The Thorpe Family came from England, in the early Colonial days. My Sister Nettie, had the Family traced to the Isle of Mann, but I have little faith in the findings of those concerns, who try to find all the branches of ones Family tree. But we do know, they came from England. The Hoak Family, also came from England, but they came from Liverpool.

Grand Father Thorpe, was a wheelright, and the inventor of the fanning mill, a device for cleaning grain. He was one of those old time machanics who, if they would build a wagon, would go into the timber, cut down hickory trees, store them in a dry place, to season, and build his wagon the next year, or later.

My Mother, was Sarah Annett Lemmon. She was born in Sandusky City Ohio, in 1838. Her Father, was Uriah Blake Lemmon. He, was born in France, but was brought to this Country by his perants, while quite young.

Mothers Mother, was also born in France, but I do not know how old she was, when she came to this Country, I do know, however, she met Mr. Lemmon, and they married, in the United States. Her Maiden name, was Mc Intush (a French lady, with a Scotch name)

My Mother had one Sister, and three Brothers, all of her Brothers were Lawyers and polititions, and her Father was a Magistrate.

Monroe Thorpe, and Sarah Lemmon, were married, in Clyde Ohio, in 1859. Their first child, died in infancy. There were five other children, born to Monroe and Sarah Thorpe.

Hattie Alvira, was born in Lorane Ohio. September 17, 1861.

Nettie May, was born in Lorane Ohio, January 27th. 1863.

Clyde A. was born in Marshaltown Iowa, September 27th. 1868.

Gertrude Olive, was born in Clay Township, Grundy County Iowa, January 16th, 1877.

Uriah Blake, was born in Clay Township, Grundy County Iowa, July 14th. 1878.

Hattie and Nettie, are both deceased, and I just received word of Gertrudes death, which occured, May the eighth, of this year. 1958.

U,B, now lives in Grand Mound Iowa, near De Witt, and Clyde,now lives in New Orleans.

As this story has to do,with Clyde A.Thorpe,and he only, I will carry the history of the rest of the Family no farther.

In the small,frontier Town of Marshaltown Iowa, on Church Street, at the home of Monroe and Sarah Thorpe, on September the twenty seventh, in the year of 1868, a Son was born. Dr. Waters said,the new arival,weighed nine pounds and six ounces.

This was their first Son, and they named him, Clyde Alonzo. The first name,in honor of the Mothers home Town, Clyde Ohio,and the second, for an older Brother of the Father.

This is my story;

My Father,was a professional wrestler,in his young days; He,and a friend made the trip,from Ohio,to the new west, in a covered wagon, on either side of which,was a sign, reading, we wrestle all commers, for money chalk or marbles. This was quite a chalange, and it was called,many times,during the trip. They started from Ohio,with two horses, and \$50.00 each, and arived in Marshaltown Iowa, with seven head of horses, and \$750.00 Father was offered 40 acres of land,on the Lake front,in Chicago,for a horse, but turned it down. The Chicaho, Millwaukee and St. Paul Railway depot, stands on the spot,now. While wondering over the vergin,Iowa prairie, Father bought 80 acres of land,for \$2.50 per acre. This land was 18 miles north-^{East}~~west~~ of Marshaltown,and 9 miles south-^{West}~~east~~ of Grundy Center, the County seat of Grundy County, and at that time,no more than a wide place,along the trail. *Bought from Wm. Williams & wife - June 25, 1868
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All the prairie,around it,was covered with blue stem crass, socalled,because the joints were a bluish color. These stems,grew to a hight of three,to four feet,with a cluster of leaves,or blades, at the roots. This grass grew,on the higher land,only, the lower sections, called sloughs,were covered with a heavy groth of course grass, called slough grass, which was much used,later,for covering stock shelters.

There were no trees, not even a bush, that grew as high as the blue stem grass.

Father returned to Ohio, and the whole Family made the trip, in a covered wagon, in the spring of 1867, and established a home in Marshaltown. Father going into the potash business, temporarily, while making preparations for tackling the job, of making a farm, on the 80 acres he had bought.

In the spring of 1869, Father loaded lumber, and other building materials, in his wagon, and headed for the prospective farm, which he could find only, by the surveyers stakes, which would have been a big job, after the grass had grown, but was not so difficult, early in the spring. After locating the place, he proceeded to build a cabin, which was known as the shanty, for many years. And a sod stable, the walls of which, were made of sod, plowed up, from the prairie, and layed up, like brick, layer upon layer, and covered with poles, hauled the 16 miles, and this, covered with slough-grass. At this time, there was a sod house, three miles away, that had been put up by another settler, earlier that spring.

Before returning for his Family, he plowed a 20 foot strip, all around the buildings, as protection, from prairie fires. This strip, would not stop a raging prairie fire, but would allow the settler, to start a back-fire, and by the time the two fires met, there would be a wide strip of burned over, land, and the home would be saved. This menence, occurred only, after the first frost, in the fall, and before the first snow.

After a great amount of work, Father, returned to Marshaltown, and loaded his family and household goods, into the wagon, and they started for their future home, leading their only cow, behind. They realised, it was going to be a tough life, and they knew, ~~XXXXXXXX~~ there was an emense amount of work lying before them. It required a stout hart, and a great emagination. No neighbors, no Doctor within nine miles (soon after they were settled, there was a Doctor, established a home, three miles from them, but they did not know he was comming.) his name was Dr. Penfield. He wrote no perscriptions, for there was no place to have them filled, but carried what medicene he would use, in his saddle bags.

Natureally, I do not remember any of the foregoing, but accumulated the knowledge from my Father and Mother, and remembered it so well, because it seemed to me, to have been a great adventure.

By the time I was old enough to know what was going on, around me, half the country near us, was settled. Young groves of maple and box-elder, were begining to appear all over the prairie, and willow hedges were visable, along the farm lines. The groves were planted on the north, and west of the buildings, as protection from the winter blizzards. There still remained however, vast tracts of vergin prairie, that had been bought up, by eastern speculators, who had never seen it, and probably, never would. These tracts, were of great value to the settlers, for they could cut the grass, and put up hay, for which, there was always, a ready merket, in Chicago. There seemed to be an understanding among the settlers, concerning this grass-land. If one wanted to make hay, on a certain tract, he would take his mowing machine, and mow a swath around the desired section, and no one else would bother it. There were some, who would preempt more than they could use, but for the most part, it worked, quite well.

In this new Country, there was a shining example, of co-operation, without organization. The farmers, would help one another, exchanging work, without any thought of keeping track of the time. The idea seeming to be, you help me, and I will help you. If one of them, became ill, during planting time, or any time, that delay would cause him loss, his neighbors would gather at his home, and his work would be brought up to date, in short order. If his home were burned, or distroyed by storm, the Naigh-bors would be on the job, amediately, not only, to simpathise with him, but to get the necessary materials, and re-build the lost home, without delay. And, while the men, were doing the work, the ladies would gather at the nearest home, and prepair food, and they all, would make a gally affair of the whole thing. I have often thought of these ocasions, as being the most Christian gestures, I have ever known.

In the fall of the year, it was haying time. As I have said, each farmer, had his patch of prairie picked out. The grass would be cut, and left on the ground, to cure, or dry, then, it would be raked into bunches, and stacked, on the spot.

After going through the sweat, it would be baled, and shipped to market. There would be stacks of hay, as far as the eye could see, by the time the haying was completed. There were no choice of locations for the stacks, just so, the ground was a little higher, so the water would not stand under them. During this time of year, every one was extra carefull, about fire, and often, there was great loss, in spite of the extra precaution.

There were no, established roads, on the prairie, just trails, where the first to go that way, had driven, as near a be-line, to his destination, as the sloughs would permit. A stranger could follow, what seemed to be a well traveled road, finally, coming to a hay stack, only to find, he had reached the end of the road.

Many, became lost, on the prairie, especialy, at night. It was like being out on the ocean, without a compass. I remember, one night, I was going home, from a neighbors, and stepped, out of the trail, and could not locate it again. Thinking I knew where I was, I kept walking, finally coming to a hay stack, and there was a stacker, by it, that I had seen, many times, from the trail. Thinking I knew just where the trail was, I started in that direction, and soon, came to another hay stack. and there was the same old stacker, and knowing, when one walks in a circle, one is lost, I worried no more, but dug a nest in the side of the stack, and went to sleep, until morning. When I awoke, it was daylight, and I could see the trail. plainly.

I seem to be getting ahead of my story. Lets go bact to the method of making a home, on the wild Iowa prairie.

I do not suppose there are many people, who have had experience, with the old style breaking plow, that was used to turn over the sod, for the first time. There was no moldboard, but it was equipped with a cutting share, to which was attached, a fin, for cutting the edge of the furrow, and steel bars, attached to the share, in such a way, they would turn the furrow over, after the share and finn, had cut it loose. The sod, was very tough, some times, there would ba a hundred feet, or more, without a break in it.

It required about two years, for the sod to rot enough for a seed bed to be made in it. To help the rotting process, the farmer would sow flax seed over the surface, and the first rain, would wash it between the sods, and it would come up, in rows, shading the ground, and keep it moist, which would cause it to rot faster, and in the fall, they would derive a small profit. Quite often, they would drop seed potatoes in every third furrow, and cover them, with the next furrow, and in the fall, the sod could be turned back, and there were the new crop of potatoes. The size of the potatoes, as well as the size of the crop, depending on the amount of rain, there had been during the summer.

Garden truck, must wait until the sod had rotted, or the sod stripped off, and the seed bed, made in the sub-soil. The crops raised, after the soil was ready for cultivation, was mostly corn, but there was oats, for horse feed, barley, to be cooked for the hogs, also, wheat and buck-wheat, to be taken to the grist mill, and ground into flour, the bran and shorts, being brought home, to feed to the milch cows.

There were plenty of wild game, such as prairie chickens, which were very numerous, and were easy to capture. We use to make traps, from lath, put together like chicken coops. They had two, trap doors in the top, made of wide shingles, hinged, near the center, and weighted, so they would close automatically. A short stick, fastened to the side of the trap, sharpened at the top, and an ear of corn stuck on it, for bait. The chickens would endeavor to light on the trap, so they could pick the corn, and the trap doors would let them through, and they could not get out. The noise they would make, seemed to attract others, and some times, would get four or five, in one trap. A grown prairie chicken, will weigh four to five pounds, and are very good eating, except for the small bones, in their legs. Prairie chickens are very wild, they cannot be kept in captivity, I have found their nests on the prairie, and taken the eggs, and set them under a domestic hen, but as soon as they would hatch, they would run and hide, and would starve, rather than, come out and eat. I am convinced, their extremely wild nature, is the cause of them, not being able to survive, after the Country was settled.

Quail, were quite numerous, and real tame. I have seen them eating with the domestic chickens, in the barn yard, and there are quite a number of them, still in their old haunts. Wild ducks, of various kinds, wild geese and brandts, were quite plentiful, during the spring, and fall flights. There were many, cotton tail rabbits, but they were not good to eat, during the summer Months, but were quite good, during the winter, and it was great sport, hunting them, in the snow. There were some, jack rabbits, but not many, until one went farther west. My Brother and I were out hunting, one day, and one of them jumped out of a bunch of grass, right in front of him. He stood and watched it, until it was too far away, to shoot. I ask him why he did not shoot ?. gosh, he said, I thought it was a calf. There were great droves of sand hill cranes, that were a great bother to the farmers. They would straddle a row of young corn, and pull up every hill, taking one step, for each hill. They loved sprouting corn. The aeroplane reminds me of them. They must have a runway, to take off.

There were many wild pigeons, along the streams, in the timber, but they were hard to shoot, because of their extremely swift flight. We use to go to the timber, in the daytime, and locate a pigeon roost (a tree, where they gathered, at night), and go back, after dark, place a smudge pot under the tree, and throw sulphur on the fire, and pick them up, as they fell. Killing and dressing them, after we got home. This method, however, soon exterminated the wild pigeon.

There were some, wild turkeys, but they were mostly gone, before I did much hunting.

During the mating season, the prairie chickens, would gather, on some smooth piece of ground, and put on, a regular war dance. The males, strutting around, their wings dragging the ground, and the little, wing-like projections, sticking straight out from the side of their head. They would make their peculiar mating call, like Boom Boom Booooo. we kids use to claim, they said. Damned ole fool.

They could be heard, in all directions, during the spring Months, every morning.

There were literally, thousands of them, when I was a boy.

The prairie country was infested with kyotes, some fox, but not many, mink, weasels, and skunks. All of which, preyed on the domestic fowl. The kyotes would steel little pigs, also. They were sneak thieves, running in pairs. One would get on the opposite side of the house, from the pig pen, and set up a howl, and all the dogs would take out after him, while his partner made a sneak, on the pig pen. The farmer, soon learned to grab his gun, and make for the pig pen, for well did he know, there was a kyote at the pig pen, while his partner entertained the dogs, if he did get one, the two of them would fight like devils, to see who would get the first meal.

The kyote became such a pest, the County offered a bounty of \$2.00, for each skelp. The young fellows, organised kyote hunts, and some times, would make quite a stake selling the skelps. This, soon brought the pests under controle.

There were a few timber wolves, along the streams, and they were quite dangerous, if any one were caught out, at night, but they were soon exterminated, for they would run in packs, making rades on young stock, at night, quite often pulling down a yearling, or, even a two year old, heiffer. The settlers would make simular raids on the wolves, knowing they would be enjoying a long nap, after gorging themselves on the kill.

Ground squirrels, were a great bother to the farmers, and were trapped, continuesly, because of their digging up the planted crops.

The most dangerous thing on the prairie, was the Prairie masoga (rattle snake) a short, heavy set, fellow, with a deadly bite, and a dispisable disposition. There were many other snakes. The garter snake, the green, or grass snake, the blue racer, who kept clear of the buildings, and the bull snake. All of which were harmeless, as far as their bite was concerned, and were known to be of benefit, around the farm buildings, for they killed many rodents, but, the bull snake, was a questionable charicter, he would just as soon have a nice young chicken, and was particularly fond of fresh eggs. He was a big fellow, some times, as much as six feet long. he had to be gliminated.

After the groves became prominent, the screach owl made his apperance. He was a chicken thief, also. The only song birds, we had orignaly, was the Meddow Lark, with his

ile-cle -picaloo, song, but after the groves became prominent, there were many came, both songsters, and others. the bird we called our mocking bird, was the brown thrush, who kept his everlasting song, going, the live long day. He would mimic any bird he could hear, even the roosters crowing, and the hens cackeling. There were many hawks, of various kinds, and an occasional, bald eagle.

There was no fruit on the prairie, except the wild straw berry, a small, but very sweet berry, that was much prized. In the timber, however, there was a great amount of fruit. There were plums, crab apples, grapes, and some, black berries. There were hickory nuts, wall nuts, butter nuts and hasle nuts, all of which, grew in great abundance.

Several times, each year, we would pack lunch, and the whole Family would go to the timber, taking buckets and bags, arriving, about sun-up, and spend the whole day, gathering the particular treat, that was ripe, at the time. The grapes were quite sour, but made exelant preserves, when sweetened. The crab apples were very sour also, and quite hard, but improved very much, after a long stay, in the cellar, and made wonderfull, spiced pickles. The plums were very sweet, and were a great find. Father, dug up some of the plum trees, and transplanted them, at home, and soon, we had plums, without going 16 miles, to get them. Most prairie farmers, bought a half acre of timber, for pole, and fire wood supply, but the fruit that grew any place in the woods, was free, to any one who wished to gather it, for there was enough, for all.

I remember, quite well, when the Chicago, Burlington, and Quincy Railway came through Grundy Center. The farmers were so well pleased, they put on a barbecue, with all the trimmings, when the first pasinger train came in. This gave us a market, much nearer home, and we could make a trip, every day, instead of three trips a week, like, when we had to haul every thing to Marshaltown. The next summer, the Chicago and Northwestern, came through, and established the Town of Conrad, which was only five miles from our place, and we could make two trips, each day.

About this time, Father bought another 80 acres, adjoining our original farm, on the south, making a square quarter section.

This eighty, had a small house, and barn on it, and Father, started the breeding of

hambletonion trotting horses. I use to get so darned tired of exersizing embro trotting colts. Driving one, three or four miles, hitched to a high wheeled sulkey, unhitching him, and hitching up another, day after day. Some of them turned out quite well however, I remember Father selling a six Months old colt, for \$500.00, which was a lot of money, those days.

As soon as the capitalests found out about the enormus crops that were being grown, in this new country, and the great herds of live stock, to be shipped, there were railroads criss crossing the country, in every direction, which gave us a chance to sell our hogs, without butchering them.

Before this time, we had to butcher all our hogs, and cure the meat, before we could sell it. The cattle could go to market on their own feet. Stock buyers would come through the country, buying up the cattle that were ready for market, collecting great herds of them, and drive them to Ohicago, letting them feed, along the way, so they would not loose too much weight. But the hogs, could not make this trip, and it was too far, to haul them, in freight wagons.

Butchering 25 or 30 head of hogs, is no small job, and when butchering time came, which would be late in the fall, all the neighbors would gather at one farm, for the ocasion, and a fiew days later, at another farm, and so on, untill the butchering was all finished, for that year. My job, at butchering time, was to catch the hogs. I had a dog, that would catch, any hog I pointed out, to him, and hold it, untill the man got a good hold of it. He would nip, their hind leg, and when the hog turned, he would sink his teeth astride their nose, the only tender spot, on a hog, and the porker would stand and squeal, no matter how large it might be. I have seen him catch a 400 pound sow, just as easily, as a small pig. This would not have been so bad, but Jack would not work for any one, but me. The butchered pork, must be taken care of, at once, or it would spoil. There were no refrigeraters, in those days, except, what nature provided, which was the reason for doing the butchering, late in the fall. The hams and shoulders would be trimmed, the side meat, cut into squares, and all of it, pickled, in brine, strong enough to float a fresh egg. All the fat, was trimmed off

even the guts were trimmed of all fat, and enough of them turned insideout, and the inner membrane removed, to hold the sausage that would be sold. All the trimmings, from the hams and shoulders were made into sausage, and what was to be kept for home use, was fried, and packed in hot fat, layer upon layer, in five and ten gallon jars. The fat, was rendered (cooked) in large kettles, until all the moisture was gone, which was determined by dipping a cotton string into it, and holding it up, and setting it on fire. If it burned without spluttering, it was done.

After the meat was pickled, and had been in the brine, long enough to be saturated all through with salt, it would be hung in large smoke houses and smoked with hickory wood. After the hogs were cut up, the rest of the work, was done by the women, except the smoking. Nothing was wasted, that could possibly be used, or sold. Even the fat that was considered unfit for table use, was saved, and used for making soap, which was made, by leaching wood ashes. The leach from which, was a strong lye. This was mixed with the grease (lard) and cooked, until it became soft soap, if it were desired to have the soap in bars, it would be poured into large dripping pans, and set in the sun, until it became hard enough to be cut into bars, so cakes. The ashes were leached, by pouring water into the tops of barrels, that had been filled with wood ashes, from the stoves and fire places, during the past year. As I have said, nothing was wasted.

Once a year, we would kill a beef. This was done, after the weather had become very cold, so the meat would freeze, when it was hung in the smoke house. This meat, was the same as you now have, in your deep freezers. Note"- the barrels that the ashes were in, for leaching, had small holes bored in the bottom, and were placed on a platform, so the leach would drain into vessels, placed under the spout.

If the beef was not all used, before the warmer weather came, it would be corned, and some of it, cut into strips, and dried.

The country was settling fast. There was a settlement of Presbyterians, established, about three miles from our place. They built a Church, and established a cemetery. They, also had a U.S. Post Office, established; it was called, the Alice Post Office.

Not far from their settlement, there were a colony of Dunkards, settled. They also built a Church. These people started the cultivation of tobacco, and it became quite an industry, until the worms, became uncontrollable. The Dunkards were a credit to the community, but stayed pretty much to themselves.

The live stock was improving, very rapidly, both in numbers and quality. There were large herds of young cattle, collected every spring, and driven farther west, where they were pastured, on the open prairie, during the summer, and driven back, in the fall, to be corn fed, for the Chicago market. All the cattle, must be branded, before being taken to the collecting yards, which was a large farm, west of our place, owned by Mr. Ash Barnes. I, well remember, what a job it was, sorting out our cattle from the rest, when they were returned, in the fall.

Work, on the farm, was hard. It was from four O'clock in the morning, until the chores were done in the evening. But, we found time to play, and could see nothing wrong with our way of life. Every thing we did, was fun, be it work or play. If one wishes to have the thrill of seeing a job well done, one must, first finish that job. That was a lesson we learned, early in life. Do not get the idea, all of the work was done by the men; It was just as tough for the women, as it was for the men. A garden was plowed and harrowed, for them in the spring, and from there on, it was up to the Ladies, to provide garden truck, during the summer, and to see to it, there were all kinds of food preserved, for the coming winter. And I am here to tell the world, the Ladies, made good. Tomato canning, was one of the greatest tasks; Tomatoes, had been thought poison until recently, My Mother told me of raising tomatoes in the garden, when she was girl, and cautioning the children, not to touch them, or they would be poisoned. They were called, love apples. These tomatoes, were vine ripened, carefully selected, and seasoned. They were very good. There were no canning machines, not even, the Mason jar, we are so familiar with. All, must be preserved in two quart, tin cans, and sealed, by pouring hot wax, over the top. There were cucumbers to be cured in brine, with just enough alum, to make them crisp, freshened again, by soaking them, and pickled in in vinegar and spices.

The house Wives, made their own vinegar, from apple cider.

Green peas, lima beans ect, to say nothing of the fruit, that had been brought from the timber, plus, goosberries, grapes and plums, that, later were grown at home. Red, white, and black currents, to be made into jelly. This work was all done by the Ladies, and they were often called on, to drive a team, during harvest and haying time. They also, did the greater part of the milking, and had all, the care of the milk, making the butter, and cottage cheese ect, not only for home use, but to be traded for goods, at the stores, consisting of, groceries, boots and shoes, and cloth for making clothes for the whole family, and after buying the cloth, they made the clothes. Mother, always had a due bill, at the general store, not being able to take goods for all the produce she delivered, consequently, no grocery bills.

When I was quite young, the wire binder, made its appearance, designed to take the place of the men, doing the binding of the grain, at harvest time. It was short lived, for the small pieces of wire, left in the straw, killed many cattle. It was not long however, before the twine binder came, and it was a success, from the start. This, was the Applebee, binder, made as an attachment, to the Mc. Cormic harvester.

Before the self binder came, all the binding of grain, was done by hand. First, being picked up from the ground, where it had been left, by the cradlers, then, from where the drop-mower had left it, then, where the self rake had left it, and finally, two men, standing on a platform, on the harvesting machine, where the grain was cut, and elevated to a table, before them, where they would bind it, and throw it off, and another man, following them, would gather up the bundles and place them in shocks, to keep the weather from spoiling the grain. Father told me, of cutting grain, with the cradle, right after the civil war, for 25 cents per day. The cradle, was made like a sythe, with fingers attached to the snathe, to catch the grain, as it was cut, and carry it to the left, leaving it in a win-row, where the binders would pick it up. There was an old cradle, around the place, but I never saw it, in use. Mother had an old spinning wheel, also, but I never saw her use it.

Now, to go back, once more, to bring up another pase of frontiel life.

About the first political activity, was to organise a public School system.

There was soon a School house every two miles, in each direction, located at every second Section line. There were four terms, every year, spring, summer, fall and winter. The first three terms were taken over by the girls, and small boys. but the winter term, was dominated by the big boys. The boys that were large enough to work, went to School, when there was nothing else to do, and during the winter, there was nothing to do, but the chores, and they could be done before School time, and after School, at night.

Quite often, there would be an exception to this rule, for the fire wood, for the next year, must be brought from the timber which, in our case, was 16 miles away. Well do I remember, getting up, at four O'clock in the morning, getting three teams ready, and hitched to three bob-sleds, driving to the woods, sitting on the rear bob, with our feet resting on the front roller, (there were no boxes on the sleds, just stakes, to keep the poles from falling off) the weather ranging, any place, from zero, to 15 or 20 degrees below, starting in time to reach the timber at, or before, sun-rise.

Ned Fox, Fathers hired man, driving the lead team, with the second team hitched to the rear of his sled, and me, bringing up the rear, so I could watch for any thing that might fall off; Tools, ect.

Ned would cut down the trees, and I would do the best I could, trimming off, the limbs, Eating a frozen lunch, and getting ready to start home, about sun down. This, started for me, when I was eight years old. We would make three trips each week, until there was enough wood collected, to last until the next winter. I especially, remember. one very cold day, we made that trip. It was so cold, that Ned, walked every step of the way home, while I was wrapped up, in blankets, atop one of the sleds. Every little while, ned would call me, and make me get down, and walk, for a while, he said it would start my blood, to circulating. One time, when he called me, I would not answer, I was so sleepy, I did not want to be disturbed, but he climbed up, and pulled me off, and cuffed me around until I was awake enough to walk. He probably saved my life, for when one, gets sleepy, with the cold, and are allowed to go to sleep, they probably, will never wake up.

I was also introduced to the walking plow, when I was eight. What I mean by the walking plow, is the plow, that one walks behind, holding to a pair of handles, trying to keep the thing, right side up, in a position to turn a true furrow. In my case, the handles were above my head, so I had to reach up, to grasp them, and many times, I was thrown, head over heels, when the share struck a red-root. To make matters worse, my plow was pulled, by a yoke of oxen, and if there is any thing, that will make a boy, loose his religion, it is plowing, with a yoke of oxen. The near ox, will step out of the furrow, which lightens the load, and well does he know it. There are no lines, the only way to control them, is by word, or the bull whip, and an eight year old boy, is not very proficient, with the bull whip. Do not ask me, why the right hand ox is called the near ox, and the other one, the off ox, for I do not know. All I know is, that is the bull-whackers jorgen. I was also introduced, at this time, to the harrow, where the boy, rides the center horse, of a three horse team, pulling a sharp toothed harrow, and if the boy should get sleepy, and fall off, these teeth would make short work of him. This has been known, to happen..

When I was ten years old, I contracted inflamitory rheumatism, and was on crutches, nearly two years. I well remember, my dear Mother, sitting beside my bed, rubbing my legs, with hot, salt and vinegar, trying to stop the pain, enough for me to get some sleep. The one thing I hold against my Father, is the fact, he would hitch up a team, to the riding plow, carry me out to it, and send me into the field, to plow. This, did not last long however, for the lever on the plow, would strike my knee, and made me so much worse, I could not stay on the seat. My right leg, drew up, under me, so much, I could not sit down, without sitting on my foot.

My sickness proved to be a blessing in disguise, for I was able to go to School, two summers, that I would have missed, had I been able to work.

Getting back to the Schools, There was only one room, in the building, and one Teacher, taught the whole School. The different divisions were known by the reader, the pupil was studying, at the time, instead of grades. they were, the first, second, third and fourth readers, and after we finished these, we would read history.

In arithmetic, we started with notation and numeration. Then, to the multiplication tables, which we learned, forward and backward, and then, were required to give the correct answers, at random. From there, we went to oral arithmetic, which I still think, was the best math, training I ever had. Next, we were given, the old Rays arithmetic, and believe you me, when one has mastered that book, he is a mathematician, period.

In the reading class, we were seated on a long bench, each pupil would be called on, to read a stanza, or a verse, and the class would discuss the merits, or demerits of the effort, the Teacher acting as referee.

The spelling class would stand along the wall, Teacher would pronounce the word, the pupil would pronounce it again, and endeavor to spell it. If the word was spelled correctly, Teacher would pronounce the next word, to the next pupil, if it were not spelled correctly, Teacher would simply say next, and so on, until it was correctly spelled, and the pupil who spelled it correctly, would advance toward the head of the class, to a position, above the one who first, mis-spelled the word.

Before the class was dismissed, they would number, from the head, like, first, second, third, etc, and the one who stood at the head of the class, would take their position, at the foot, the next class, but would get a head mark, for every time, they were at the head, when the class was dismissed, and the one who had the most head, marks, at the end of the term, was declared the champion speller, for that term.

Periodically, there would be a spelling contest, at the School house. These contests were held, in the evening, and the whole neighborhood, would attend. There would be two pupils chosen, to choose sides, generally, a boy and a girl. They would choose their contestants, alternately, until the whole school were standing, on one or the other sides of the room. Teacher, would pronounce the words, the same as in the regular spelling class, except, when a word was missed, and the one who missed it, would take their seat, and the next in line, on the other side of the room, would be given the word. This would continue, until there was only one person standing, and that person, would receive the coveted prize.

Once a year, there would be a spelling bee, at the center School, followed by an entertainment.

The next public enterprise the settlers tackled, was a highway system. There was a board of Supervisors elected, one from each Township, in the County. Their job, was to supervise the construction, or repairs of the highway, or appoint a Road Master, for that purpose, in the Township. Each male, past 21, was required to pay a tax, of two Dollars, each year, which could be paid in cash, or worked out, on the road. A person was allowed a Dollar for each days work, or two Dollars, for a man with a team. If the tax was paid in cash, the Money was used to buy materials for colverts, and road scrapers. A receipt for the payment of the tax, was required, at the poles, but the tax must be paid, whether or not, one voted. The roads were established on every section line, and graded first, where needed most, in the opinion of the road Master. But, if a settler thought he were being slighted, he could present a petition, to the Board of Supervisors, and a hearing would be called, where he could present his claim, and any one in the Township, could present their opinion, for or against the petitioner. And the findings of the Board, were final.

The social life, was simple, and pleasant for every one. There were no social outcasts, for reasons of poverty or riches. There seemed to be recognised lines, dividing the social groups, generally, consisting of School districts, possibly, because of School entertainments, where they became better acquainted. Or Church activities, which were held at the School house. The more closely associated groups, were the nearest neighbors. There . always was a big Sunday dinner, at one of the near neighbors homes. Some times it would be at our home, some times, at Mr. Martins, the next Sunday, at Mr. Woods, and so on. Making it a pleasure for every one, and a hardship, on none.

The men would get together, and discuss local politics, to the prospective crops. The boys, would be chasing around the neighborhood, on horse back, chasing kyotes, or having an occasional horse race. The girls would gather in some secluded place, and what they talked about, I certainly do not know. But, the Ladies would congregate, in the kitchen, and what a dinner, they would produce.

There was one thing, all could depend on, every one would be there, at dinner time.

There were settlers whose judgment and ability was recognized by every one, and they, naturally became leaders.

If there was any person who was openly, dishonest in his dealings with his neighbors, they would find life very unpleasant, and the best thing for them to do, was to leave, in fact, it would become compulsory, if their perfidy continued. There were very few criminals, however, among the settlers, and those who did, show up, were politely invited to leave. And, in case they ignored the invitation. Well, they left, anyway. The latter procedure, was practiced only, after due consideration, and undeniable proof of their guilt. There was no mob action, at any time.

There was a farmer ? thief, in the Holland district, that plied his trade for some time. There was much stealing of pigs, and young stock, as well as grain, and he was not caught, until one of the farmers, secretly, hired a detective, who came into the neighborhood, as a farm hand, and played the part of a feeble minded fellow. Some time I will write a story, about him. The culprit was soon caught, in the act of stealing a bunch of young pigs, and was sent to jail.

I think the other boys in the neighborhood, led pretty much the same life that I did. In fact, there was no other way. There were a few molly, coddles, but, there was, an occasional one. That was not the proper environment to produce them, I knew of only one, and I met him, after he became a man, and he was just the same. His Brother-in-law, had appropriated most of his Father's estate, and would not listen to his wishes etc. Whining, instead of fighting back.

In the winter time the young folk would have parties, the highlight of which would be a sleigh ride. The box, on the bob sled, would be filled with straw, there would be plenty of blankets, we would, all pile in, and while the bells jingled, and the crowd shouted and laughed, the driver would manage to tip the whole crew, into the snow, at least once; It was all for fun, and every one enjoyed it, immensely. Also, during the winter, there would be meetings, at the School house. There would be, dialogues, recitations, pre-arranged debates, and occasionally, there would be a magic lantern show, which was the fore-runner of the motion picture shows.

The School house, was also used for religious meetings. Every Sunday, there would be Sunday School, followed by a sermon, delivered by a Free Methodest Minister, who preached, hell fire and brimstone. The Church came, when I was about seven years old.

Most of the political arguments were held in the general store, where the farmers would gather, ocasionally, using cracker barrels and nail kegs, for seats, and, wo be unto the polotition who had failed to keep his promices.

I have chronicaled the life of the people who made Iowa, and a very happy life it was. Yes, it was tough, and the people who lived it, were aslo tough. Most of them, had lived, most of their lives there, if not all of it, and if there was any thing better, t they did not know of it, consequently, no yerning for a change. We young folk, had fiew cares, and the sad moments were soon forgotten. Hard work, made us appreciate the fun we had, all the more. And, we had the satisfaction of seeing a wilderness, turn into a garden, knowing that we, were a part of the force, that brought that change about.

But, there is an end, to all things.

1884 When I was 16 years old, my Mother became ill, and Father decided to take her to Ohio, where, it was thought, the Doctors were more skilled. Our farm, was rented to Mr. Walker. I was sent, to live with my Sister Hattie, who had married Ned Fox, and lived on a farm, in Tama County. It was a large farm, known as the Delglish farm. My Sister Gertrude, was also taken by Hattie, while, my Brother, went, to live with my Sister Nettie, who had married Winferd Hinckley, and lived on a farm, in Clinton County, near Delmar Junction, in eastern Iowa.

I worked on the farm, until the next spring, when Father brought Mother back, with no hopes of recovery. Mother stayed with Hattie, and Father decided to go back on the farm. He proposed to take care of the house, and do the cooking, while I did the farm work. I know now, it was a foolish move, but I was so keen to get back to the old neighborhood, I was willing to try any thing. I was happy to think I was going back to where I could be with my old associates.

I did not know then, that those ties, once broken, will never be the same again.

I had six head of horses, working three in the forenoon and the other three, in the afternoon, which gave the horses a chance to rest, but not me.

My old chums, were just as kind and considerate, as ever but, some how, I had gotten out of stride. Anyway, I had no time to try and get in step again, for my work kept me busy from sun up, to sun down, seven days, each week. The weeds grew faster than I could plow them under. Of course, the effort was a failure, the idea of a 17 year old boy, farming a hundred and sixty acre farm, was too foolish to mention. But, I did the best I could, and after I had picked what corn I did, raise, and had it in the crib, Father said we would give up the whole thing, and I had better get myself a job, and shift for my self.

Cold weather had set in, by that time, most of the corn had been picked, and there was no other work to be done. All the clothes I had, were on my back, and I must have work of some kind, for I must have heavy under wear.

I found that Will Lyons, had a few acres, still in the field, and got the job of picking it, at two cents per bushel, and as I could pick 80 bushel per day, I could soon have enough, to buy myself some clothes.

I soon had enough to buy a couple of suits of under wear, a cheap suit of clothes, and a pair of shoes. It was my first custom made suit, I had always worn home made jeans. The shoes were my first, also, I had always worn boots. But, it took all my money, to buy them. I did not worry too much however, for I had more corn to pick, and could soon make it back.

Sunday evening, after I had bought me clothes, I went to Town with some of the boys. We were riding in a light wagon, and on the way home, another bunch of the boys, on horse back, caught up with us, and of course, there had to be a race.

Will Stover passed us, and just as his horse entered the road, ahead of us, he fell. There was a terrible wreck, his horse was killed, and every one was thrown from the wagon. Luckily, no one was badly hurt, some of the boys lost patches of skin, but, I had my left thumb thrown out of joint. One of the boys held my wrist, while another, pulled my thumb, back into place. But I was through husking corn, for that year.

I was out of a job, and broke.

I was too proud to go to my Sister, and finally found a job with Mr. Sharp, who was a stock feeder. I was to take care of a bunch of fattening steers. Mr. Sharp had a Son, who was to go to School. George, was my own age, and I traded my suit and shoes, to him, for a sheep lined, ducking coat, and a pair of felt boots and over-shoes, I had to have them, if I were going to be working in the feed lot, during the winter.

I thought I was set, for the winter, when George was expelled from School, and his Father told him, if he could not go to School, he must go to work. And I was out of a job again. They said I could stay with them, until spring, and help George, but I knew George needed no help, and that the offer was just a friendly gesture. I would have none of that, and found a job with Mr. Mast, who gave me my choice of working for my board and going to School. or working full time, and he would pay me, \$4.00 per Month.

Really, I had no choice, I had no clothes fit to wear to School, and no Money, with which to buy books. So, I worked for him, three Months, and drew \$12.00. It was during my stay with Mr. Mast, that the worst storm, in history, came through. It was a nice, worm day, too worm, for that time of year. I hitched a team to the wagon, and went into the field, for a load of hay. I had the load partly on, when I noticed a black cloud, in the north-west. Soon, the wind changed into that direction, and I knew, there was trouble brewing. I jumped onto the wagon, and headed for the barn, and got there just in time, for the storm had struck, and the air was filled with fine snow, that cut the face, like sand. It was a large barn, that sheltered all the stock, under one roof.

I drove inside, and closed the doors, and went to the back, and drove the stock that were in the back lot, inside and closed the back doors. Then, I unhitched the team, and proceeded to do the evening chores.

I was ready to go to the house, about five O'clock. When I opened the barn door, and looked out, the snow was so thick in the air, I could not see, two feet from my face.

There was a fence, leading from the barn, to the road, and another, leading along the road, to the house. But there was a sixteen foot gate, in the road fence, and I was afraid to try and negotiate that gap, for the gate was open. I went back to the barn and got a rope, and tied one end of it to the gate post, and held to the other end.

until I located the other side of the gate, and so, to the house.

That storm struck Dakota, about noon, and many School children perished, trying to get home from School. Some Teachers kept the children at the School house, and some of them, were compelled to burn the seats, after the fuel supply had been exhausted, in order to keep the children from freezing. I heard of one case, where the Teacher had to tear up, a part of the floor, for fuel. But, those were the wise ones, they saved the lives of the children, that were in their care.

My Mother had passed away, last September, and was burried in the beautifull Cemetary, at Beman Iowa. I had nothing to keep me in the old neighborhood, and when Frank Lynn told me, he was moving to Pocahontas County, and, if I wanted to go out there, his Brother in law, would give me a job, on his farm. This Brother in law, lived out there. Frank, said he could get me a pass, for taking care of the stock, in route.

I excepted the offer, and once more, I was headed for the new frontier.

In the latter part of February, 1887, we loaded two cars, with stock, farm machinery, and house hold goods, and headed for the new west.

Ariving in the small Town of Rolf, earley in the afternoon, of a cold and rainy day, we unloaded the stock, into the stockyard. My new boss, came to Town with extra teams, and we loaded all the goods, into the wagons, and I was sent for the cattle.

Someone, had left the gate open, and the cattle were gone. As I have said, it was a cold, and rainy day, the rain freezing on the ground, and we could see the hoof marks of the cattle, on the ice, showing, in which direction thay had gone. I was sent after them, on foot, and alone. They had headed south, going with the storm, and when I overtook them, it was nearly dark. I had not seen any signs of habitation, in the whole distance I had followed them, just, the wild and wind sweped prairie.

The only way I could tell the direction, was by the wind, and I knew that could change, at any time. I was quite sure I could find the Rail Road, and if I could tell which way I was from the Town, I should be able to find the Town. I had a lot of trouble driving them against the storm, but, after a long time, I got them back into the stock yard, and went, to find the folk. They had gone, It was about eleven Oclock. at night, and there was no one in sight. I walked up the Towns only street. There was

only one light in sight, and that was from the window of a large building, the sign in front of which, proclaimed it to be the Central House. I was cold and wet, and must find shelter, so, I tried the door, and found it, not locked. Going inside, I found only one person there, an old gentleman, sitting in a rocking chair, sound asleep.

The thing that caught my eye, was a large heating stove, and it was good and hot. I honkered down behind that stove, and proceeded to get worm; I remained there for some time, when an elderly Lady, came in, from the back. She looked at me, for a moment, gave me a pleasant smile, and went to the man, shook him, and said. Miles, wake up, we have Company. After asking me a few questions, she led me into the kitchen, where she had buckwheat cake batter, raising, preparatory for for next mornings breakfast. I do not believe I ever tasted better food, than that good Lady served me, that night. And then she showed me a nice bed, and I was soon, sound asleep.

I have never forgotten Mr. and Mrs. Miles Coffin, with whom, I became, very well acquainted, later.. Bear in mind, I was a big, huskey boy, the size of a man (five foot, eleven inches) weighing one hundred and seventy five pounds, with a boys face. I was any thing but soft, but enough is a plenty, I needed rest, and got just that, through the kindness of those good people.

Mr. Lynn and Mr. Lyons, came to Town the next morning, and we drove the cattle to the farm. No questions, no excuses, I suppose they thought I found the cattle, just back of the stock yard. But Frank knew I had no money, and where he expected me to stay during the night, I will never know.

I started to work for Mr. Lyons, the first day of March, at \$18.00 per Month, including board and washing. The Family, consisted of Mr. and Mrs. Lyons, two small boys, the hired girl, and my self. I do not think, I ever knew, two more lazy people, than Mr. and Mrs. Lyons. The hired girl and my self, did all the work, that was done on that farm, for the next nine. Months. But we were well treated, had plenty of good food, a good place to sleep, and no quarling. about any thing. Our work was cut out for us, and we did it, to the best of our ability, and there was never any complaint, and we were paid for it. What more could we ask ?.

Mrs. Lynn and Mrs. Lyons, were Sisters. Mrs. Lynn, was a twin Sister of Montie Sharp. They were the children of Mr. and Mrs. Sharp, for whom I worked, part of the first winter, after leaving home. The Sharps, had another Son, who I mentioned, as being expelled from School.

George was a harum, csarum sort of a fellow, while Montie, was a goody, goody boy. The Sisters were telling each other, and the world, what a shame it was, that George was such a disgrace to the Family, and wondering why he could not be more like, dear Montie. He was such a lovely boy, so polite, dressed so carefully, and kept such good company.

About, 20 years later, I visited the old neighborhood, and this is what I learned, about the Sharp Family. Mr. and Mrs. Sharp, were quite well to do; Before he passed away, he gave the home place to Montie, consisting of eighty acres, highly improved. He gave George an eighty, across the road from the home place, and built a small house and barn, on it. He gave each of the Daughters, eighty acres, deviding a small amount of Money, between the four, his Wife having passed away, before he.

As I have said, about twenty years after I had finished working for Mr Lyons, I visited the old neighborhood, going to Beman, on decoration day, to visit my Mothers grave. Having nothing better to do, I called George, by phone, and ask if he were coming to Town. He said he had not entended to, but for me to wait for him, at the Post Office, and he would be right down. That rascal knew my voice, after twenty years.

I got the whole story. George had married one of the Conrad girls, they had a large Family, mostly grown. He was living on the Mel Good place, which he had bought, he still owned the place his Father had given him, he owned the old home place, which he had bought from Montie, and both of the places, the Father had given to the girls.

He told me, he was entirely out of debt.

Montie was working in a small clothing store, in beman, and living in a rented home.

I learned more about the old neighborhood, from George, than I ever expected to learn from any one. And, through him, I met many old friends, I would not have known where to find, otherwise. I might add, I had a wonderfull time, thanks to George.

Now, back to where we left off.

During the summer I worked for Mr. Lyons, I drew \$6.00, to buy overalls and plow shoes. My contract called for me to work, until the corn was in the crib, and I finished that job, the first of December, making just nine Months.

Mr. Lyons paid me \$156.00, which was due me, after deducting the \$6.00, I had drawn.

There was still some corn in the field of some of the neighbors, and Mr. Lyons told me, in case I would like to make a little extra money, I was welcome to use one of his teams, and husk a little corn, by the bushel. Providing, I would make my home with them, while doing it. I picked 2000 bushels, and left, for Marshaltown, the fore part of January, 1888. I was 19 years old, last September, and had all the farming, I could stand.

On my way to Marshaltown, I decided to visit me Sisters, all of whom. now lived in or near Berlin, in Tama County. I arrived in Gladbrook, Saturday evening, to find, there was no train going to Berlin, until the next Monday afternoon. It was only seven miles, and I decided to walk. I arrived, in Berlin, quite late, and making inquiries, learned where Win and Nettie lived, and went to their home, and rapped on the door. Win, came to answer the summons, and I noticed, he did not recognise me. I ask him, if I might be allowed to stay all night, and he informed me, there was a Hotel, up town, but I was ready for that one, having lived there, I knew the reputation of the Hotel, and told him I had been there, and did not like the looks of the place. He seemed to agree with me, and went, to ask Nettie, if she could fix me a bed. She ask him, what kind of a looking fellow it was, and I heard him say, oh, he is a respectable looking chap, and she told him, if I would wait, outside, until she came down and fixed me a deb on the couch, I might stay.

After a while, Win came to the door, and told me I could come in, and go to bed, and left.

The next morning, Nettie sent my Brother in, to ask, if I would have breakfast with them, when ^(MY DAD) U.B. saw me, he jumped into bed, with me. Win, finally came to the door, and turned, to tell Nettie, That darned kid, is in bed with that fellow. I heard her say, you darned chump, that fellow, is Clyde. I got a good wooling, but it was worth it.

When I arrived in Marshalltown, the first thing I did, was to look for a place to board, and found it, with Mrs. Cole, on Church Street, just two blocks from where I was born. I was to pay, \$3.50 per week. It was a nice place, with plenty of good food, and a nice room. Mrs. Cole proved to be a real nice Lady, and did every thing possible to make things pleasant for her boarders.

The next day, I called on the Marshall School of Engineering, and was informed, I must secure a contract, with some approved Machine Shop before I could enroll in the Engineering class, of the School. There were three such shops, in Town, and the first one I called on, was the Frederick and Shorthill Machine works, and discovered, the Mr. Frederick, of the firm, was an old friend of Fathers, and I had no trouble, getting to work for them. I left their place, with a two years contract, as Apprintis Machinest, and was to get the magnificent sum, of \$3.00 per week.

Thking my contract to the School, I was enroled for a two year course, paying the full two years tuition, in advance. I had very little Money left, but I was sure of being able to go the full two years, and would manage to finance the board problem, one way or another, and they could not throw me out of School, for not paying my tuition.

My pay, at the shop, lacked fifty cents of paying my board and room, and I soon was compelled to get outside work, in order to make both ends meet.

I found, I could get wood, to saw, making stove wood, out of cord wood, at fifty cents per cord, and by sawing two cords each week, I could have a few cents left, after paying my board, to buy paper and pencils. There was one good thing about the School, I had no books to buy, but I did, have to furnish my own drafting instrumnts, and paper.

My sawing wood, two nights each week, made it necessary for me to burn the mid-night oil, to some extent, but the main thing, was to keep up with my studies, and I did that

My first job in the shop, was sweeping, but I was soon sent to the foundry, as molders helper, and was there, nearly three Months, the last few weeks of which, I did some, plain molding. Then, I went to the machine shop, as machinests helper.

I progressed very rapidly, for it suited me better than any thing I had ever worked at. Within three Months, I was operating a large lathe, turning long bars of steel, into shafting. We had to make two cuts, on each bar, a roughing cut, and a smothering cut, this required about 12 hours, on a 20 foot shaft, and it looked to me, like a waste of time. I wondered why both cuts could not be made, at the same time, saving, nearly half the time required, to finish a shaft.

I made a drawing of a cutting tool, with two cutting points, and took it to the tool maker, and he made it for me. It was like a two prong fork, and I ground one point, for a roughing cut (sharp and narrow) and the other, for a smothering cut (wide and rounding) I had to set the tool just right, which took some time, but it worked perfectly.

I called for the crane to change shafts, so soon after placing the first shaft, it attracted all attention, and he came over to my lathe, to see what had happened. He measured the shaft I had just finished, and could find nothing wrong with it, then, he came over to my lathe and noticed the tool. He asked me where I got it, and I told him, Mr. Tancena made it for me, and he went to the tool maker, and was given the drawing I had given him. Coming back to me, he wanted to know, where I had got the idea, and I told him, I did not like going over the same shaft twice, and wanted to see if it would work. He watched it for a little while, and said he was glad someone was using their head, and walked away.

In a short time, I was called to Mr. Fredericks Office, and after talking with me, for some time, asking about my plans for the future, he informed me that, beginning the next Monday, my pay, would be \$3.00 per day, instead of \$3.00 per week. This, was indeed, good news, and I could stop sawing wood. I could not, but notice the difference in the attention I received at School, after they heard of my good luck.

\$3.00 per day, was regular machinests pay, at that time.

It was not entirely because of the new tool. Mr. Frederick told me he had been watching me, for some time, and had decided to give me the raise, when my first year

was out, and the new tool had induced him, to start the change at once.

All, had one made for each shafting lathe, and when I left there, they were using them, on the planers, boring mills and some of the smaller lathes. They are quite common, now, and are called, gang tools, some of them have as many as six cutting points.

My former experience had taught me to save my Money, and when my two years was out, I had saved, quite a nice little nest egg.

I decided to visit me folk, all of whom, now lived in, or near, Brainard Nebraske. Ned, was running a general store, there, in company with a partner, a Mr. Wahnhauff, and Win and Nettie, lived on a farm, near by. As usual, they did not know I was coming, and when I went to the Fox and Wahnhauff store, and inquired for Ned, no one knew who I was talking about, but when I ask for Mr. Fox, I was told, he was at home, just back of the store. Ned, was not his real name, just a nickname, and when they had moved into Town, Hattie decided to drop the nick name, and get into the habit of calling him by his proper name, Henry. I had let the cat, out of the bag, and in a short time, every one in Town, was calling him Ned. And I think, he kind of liked it.

While I was there, I made the acquaintance of Mr. Nepolion Miller, who was preparing to make the trip across the plains, in covered wagons, and was looking for some one, to drive one of the teams. I thought it would be a wonderfull trip, and agreed to help him get ready, and make the trip with them. The deal was closed, and I went, to live with them, while we were making preperations for the trip, the starting time of which, was only a few weeks off. We were in Town, one day, on foot, and on the way home, which was only two miles, we were crossing a pasture, taking a short cut. The snow was quite deep, and when we were about a quarter of a mile from home, he fell. He could not get to his feet, and could not stand, when I helped him up. I finally got him on my back, and carried him the rest of the way home, and went back to Town, for a Doctor. When the Doctor arived, he said Mr. Miller had a very bad case of pneumonia. He never got up, Dying, a few days later. He had been a hard drinking man, and the medicene did him no good.

He had sold his farm, but there was quite a lot of stock, and some grain, to be be disposed of. The man who had bought the farm, told the Widiw, she could live in the

house until the business was concluded, so she hired a neighbor girl, to stay with her, and hired me, to look after the stock, and help, with the business. It was not Engineering, but I could see no other way.

The selling was slow, every one seemed to know, she must sell, and were looking for bargains. They seemed to think it was open season, to grab every thing in sight. I even, caught one of her Brother in law, stealing corn, from the crib. It was like a lot of buzzards, on a dead mans carcass.

I discovered, there were a lot of debts, some of which, were saloon debts, whether true or falts, I did not know, but I refused to pay any bills, that could not be proven.

Mr. Miller, had made a will, leaving every thing to the Widdow, and named her, Executrix, but the relatives tried to break the will, which delayed the probate proceedings. But, the Jodge, finally threw the whole mess out of Court.

It would have been just as well, had she turned the whols business over to the in-laws, and let them fight it out, among them selves, for, after all the debts were paid, there was not enough left, to even pay my salary. My short visit, had extended into more than a year.

In the Month of May, 1897, the Widdow and I, were married, and made the trip to Oregon, not by covered wagon, but by the overland flyer, on the Union Pacific Railway.

There were some wonderfull sights along the way. The lava beds, of Idaho, were a magnificent sight, not for their beauty, but for their grandure and extent. One could emagine the specticle of that great mass of hot lavy, flowing over the country side, completely destructive. The mica beds, were realy beautifull. The train stopped long enough for the pasingers to obtain souviners. It being, just at sun rise one could look toward the sun, and it seemed, there were bilions of shining jewels.

We sighted the mountains, just before sun-down, and were disapointed because we would enter the range, during the night, but, the next morning, they were still a long way off. The air it so clear, it is dificult to judge tistances.

We entered the State of Oregon, near Huntington, crossing the Snake river, soon after entering the mountain range. From there on, there was nothing but, mountains, with an ocasional, small Valley, the train, winding around the mountain sides, through

through tunnels and snow sheds, until we arrived above the Grande Ronde Valley, which lay to the west of us, under the setting sun. There it was. A beautiful Valley, forty miles long, and about twenty miles wide, in most places. The Grande Ronde River stretching from end, to end, winding tributaries from the main stream, to the foothills, and straight, irrigation ditches, carrying water to the numerous farms. It was like a beautiful painting, with a green background, and silver ribbons stretched over it.

We were still, a long way from the Town of Union. We must travel around the side of the mountain, down, down, until we reached the floor of the Valley.

My Wife's Brother John, who lived in High Valley, a small Valley, six miles from Union, in the foot-hills, met us at the train, and we stayed with his family, for a few days.

In the mean time, another Brother, "Sam," who lived in Cricket Flat, forty five miles from Union, and ten miles from Elgin, which is located at the extreme lower end of the Grande Ronde Valley, informed the High Valley Brother, there was a homestead, near his place, that could be bought, cheap, as the Home-steader had been murdered by his Wife's lover. It contained 160 acres of pine timber, and the widow could not stay on it, for she had a date with the Sheriff. Being out on bail, at the time.

We went to Elgin, and hired a livery rig to take us out to Sam's place, and, in a few days I saw the widow, and bought her relinquishment, for \$25.00.

Leaving my Wife with Sam's folk, I returned to High Valley, and bought a team, harness, and wagon. I bought the team of Brother John, and he agreed to help me break them.

They were a pair of wild kyoooses (bronks) that had never had a rope on, except when they were branded. They sure were wild. We had to harness one of them over a tame horse. We hitched them up, one at a time, with a tame horse, and drove them to Union and back.

The next morning, we placed the wagon in the road, headed in the direction I wished to go, and by using other horses, as decoys, finally got them hitched up.

I got into the wagon, got a good hold of the lines, and the men turned them loose.

They started, on the dead run, and I let them go; In fact, that was the only thing I could do. they ran for a mile or so, and decided to take it a little slower, I kept them going in the right direction, and when we reached Willow Creek, 20 miles, on our way, it was noon. I stopped, and unhitched them, gave them water and feed and found,

I had an entirely different team, from the one I had started with, that morning. I let them rest, for about two hours, and hitched the up, again, without much trouble. I let them walk, the rest of the way to Sams place, arriving there, about eleven O'clock, with a very tired team, and a very tired driver.

Having obtained the release from the Widow, I was in no hurry to file on the place, wanting to get a house built (there was nothing but a small cabin, on the place) and a place to keep my team, and the cow, I intended to buy.

I went to the saw mill, and bought the necessary lumber, for \$6.00 per thousand feet. and after cutting down a tree, that was so close to the location I had picked, for the house, I was afraid it would blow down in it, we started the building. By the way, that tree, was seven foot through, four feet above the ground. We used an eight foot cross-cut saw, for the job, and had a very short stroke, when near the center.

We were getting along nicely with the house, when a neighbor came over, early one morning, and ask me, if I had filed yet. When I told him no, he told, another neighbor, was going to La Grande, that very day, to file on it, for his Son, who had just become of age. This neighbor, I had only met once, his name was Risdom. I knew, by me buying the relinquishment, he would not stop any one else, from filing, if they were mean enough to do such a thing. There was only one train, to La Grande each day, and that was due to leave Elgin, in just one hour. I jumped on one of my horses, and headed for Elgin. and when I got there, sure enough, there was Risdm, all ready to go.

I knew, very well, he would be better acquainted in La Grande, than I, and that I could beat him to the Land Office only, by strategy. I spent the next few hours, trying to figure out, that strategy. When the train stopped in Island City, a short distance from La Grande. I went up to the front, intending to talk the Engineer, into letting me ride the rest of the way, with him. The scheme worked, and when we were hearing the city, and going around a long curve, the Engineer, pointed out, the Land Office. We were nearer to it, than we would be, when the train reached the depot.

He slowed up enough, for me to jump off, and when Risdom came into the land Office, I was signing the last of the papers.

I never saw a more frustrated man, than he was. His face turned red, and then white. He did not try to hide his feelings, saying he could not understand how I had beten him. but declaired, he would get even with me, if it took the rest of his life, as though I ~~XXXXXXXXXXXXXXXXXX~~ was the one who had been in the wrong. This was a direct threat, but I paid no attention to it. More about this man, later.

Cricket Flat, belies its name, there are some places on it, that are nearley flat, but they are very fiew. There are canyons, running from the River, through it, in great numbers, which are, from fifty to two hundred feet deep, and, in many places, the sides of them, are, nearly streight up. The only way one can assend them, is to find a game trail, that angles up, and is probably three or four miles long, and the only thing that could be sure of reaching the top, would be a mountain goat.

In the spring of the year, these canyons, become a raging torent, when the snow is melting. The aries that are farmed, are nearley flat, in most places, and are in patches, ranging from a fiew square yarde, to several hundred acres. There are rock draws, running through the farm land, in every direction, one could mistake them for natural drainage, but they are not, there are no outlets, from them. The bottom of these draws, are covered with shell rock. One would emagine, the farm soil had been dumped on the rock, but, the rock do not extend under the soil. I am at a loss, to account for this unusual formation.

The timber land, is good for nothing but the timber that grows on it. Even the grass, is so saturated with turpentine, nothing will eat it, and if the timber is cleared off, it requires several years for the turpentin to leave it enough to allow any thing but pine, to grow.

There is a great deal of land that is neither timber, or farm land, and this, is the stock range, where great herds of cattle. horses and sheep are pastured. There is an everlasting feud, between the cattle men, and the sheep men. Horses, and cattle, will graze over the same range, some times, in the same herds, but, once a flock of sheep, have fed, over it, neither horses nor cattle, will touch the grass, until there has been a rain, and, in that country, that seldom happens, so, the range is no good for

any thing but sheep, until the next year.

There is about half the land, covered with timber, and perhaps a quarter of the balance, is farm land.

Water, is a great problem, during five or six months of the year. There is no water, except the springs along the sides of the canyons, and these springs are very hard to get to, with anything, one could carry large quantities of water, from them. I made a cart, using the rear axle of a wagon, and put a front wheel on one side, and a rear wheel, on the other. Changing them before starting, and again, after I turned around, so the rear wheel would be on the down-hill side, going and coming, and dug a hole for the rear wheel, at home, so the tank would set level. I placed a four barrel tank on it, and by taking the stock to the spring every day, it would last for some time. These springs never change their flow, winter or summer.

I made a cave back of the house, to keep the food stuff in, and the first winter, it filled with water, from the melting snow, and we moved every thing out, and kept the water for house use. It kept fresh, as long as it lasted. So I decided to dig a reservoir in the yard. I dug a hole, six feet in diameter, and twenty five feet deep. This, filled with water the next winter, and lasted us, as long as we lived there.

The man who bought the place, wrote me, he ran out of water, and decided to dig it deeper, for more storage. After going down about four feet, he struck a vein of water that came in so strong, he was unable to get all his tools out. He must have struck one of the under ground passages, leading to some spring, it could not happen again, in a thousand trials.

The timber consists of white and yellow pine, tamarac, and white and red fir, There is no fruit in the timber, except, a few dew berries, and quite many sarvis berries. The sarvis berry thickets, are a good place to keep away from, for, if the berries are ripe, there will be bears there.

The greater part of the timber, is yellow pine, which grows very large, both in girth, and height. There was forty acres of yellow pine on my claim, that one could not drive a team into, from any side, for more than a few yards, and there was not a tree, less than four feet, in diameter, nor one, less than a hundred feet, to the first

branch, and this was not at all, uncommon in that section. This type of pine, grows close together, and grows very tall, because of that fact. There is more yellow pine, than all the balance of the timber combined.

White pine, grows in more open spaces, consequently, branches more, and this type, when sawed into lumber, is very knotty. It does not grow very tall.

Red fir, is the toughest wood that grows there, it is called, hard wood, but is not really, hard, by comparison with Eastern, hard woods. White fir is a beautiful wood, when cut into lumber, and is used very much, for interior decorating.] *start here.*

The two species of fir, look very much alike, to the stranger, but the needles are quite different, and the way they are formed on the branch, is quite different, also. The red fir, has their needles, all around the branch, like a cat's tail, while the white fir, has the needles on each side of the branch, like a feather.

The Tamarac is the most valued, locally, because of it being so easy to split. It is used for making fence rails and clap-boards. The latter being used extensively, to take the place of shingles. One may split a tamarac log, with a common axe, and by using a frow, may split out a board, from it, as much as six feet long, a foot wide, and, as thin as one quarter of an inch.

Cricket Flat, is 3000 feet above sea level, and also, is above "fly" level. There are no flies, there at all, but the bed bugs are numerous. Lift a piece of loose bark from any, pine tree, and they will be found, by the hundreds. Many of the natives, move out of the house, in the summer, and sleep in the barn. We was never bothered with them, however, and I do not think any one would be, if they were a little more particular.

I went to help a neighbor, do a job of work, and the Wife went along, she found the bed bugs were crawling on the walls, like flies do, in the east. Nettie, made me take off my clothes, before going into the house, when we returned home.

There was a pine tree, in the Looking-glass (a district, some miles back in the wild country) that was 27 feet, in circumference, six feet above the ground. It was estimated to be more than a thousand years old.

The most hated animal, there, is the wolverine. Hated, alike, by man and beast.

He will follow a line of traps for miles, eating every thing he finds in them, as long as he can hold it, and tear every thing, to bits, after he can eat no more. Just plain cussedness. A trapper will follow the trail of a wolverine, all day, and count the day well spent, if he can distroy the varment. The trappers have cabins, scattered through the forests, where they may stay, for the night, if they are delayed in making their rounds. No one cares to travel, in the deep woods, after dark. These cabins are always stocked with salt, salt pork, sour doe and course flour, and are never locked. Any one is welcome to stay in one of them, when necessary. All that is required, is to clean up the place, before leaving, and to fasten the door, so the animals can not get in.

There are many mountain Lyons, (cougars) there, although one is seldom seen, they may be heard, most any night. They sound like a big tom cat, on the prowl, if he were making his calls, through an exceptionally large, loud speaker. But, if you ever hear their scream, when they are making a kill, you will never forget it. There are wild cats, and lynx, a plenty, and there is a cat, that is just as wild as any wild-cat, that has a long tail, like a domestic cat. They are very large, and like to hang around the settlements. I think, the origonated, from a cross between the wild-cat, and the domestic cat. The domestic cats there, are the largest I have ever seen, and some of them are just as ferocious as the wild ones.

There are a variety, of bear, from the little, brown and black ones, to the white faced bear, which is much larger than the grizzly, of which there a great number, but do not like to stay near the settlements. The cougars, prey on the domestic stock, mostly, sheep. But they also kill cattle, and young horses. He does not eat the flesh, unless the kill is too small to satisfy his hunger, in which case, he will devour some of the flesh. There are professional hunters, in the Cities, who are called on, to get rid of predetory animals, that become too frequent with their killings. They have a pack of hounds, and if called on soon enough after the kill, the hounds, will pick up the trail and the beast, is generally killed.

While I was there, these killings became quite frequent, in our heighborhood, and averaging one, every third or fourth night. The hunters were called from La Grande, but they arived too late, for the dogs to pick up the trail. They seemed to be confused,

when taken to where the kill had been made, and the hunters had to wait for another kill, which occurred, two nights later.

There was something about this system of killings, that puzzled the hunters, as well as the dogs. Even, when the kill was a large animal, the throat was cut, as is usual, with the cougar, but a portion of the hind quarter, was eaten away, also. When the hounds were brought to the second kill, they, were again puzzled about the scent. Some of them wanted to trail in one direction, and some, in another. It was found, the dogs that got their scent from the fore part of the animal, wanted to go in one direction, and the ones that got it, from the rear, wanted to go, in another.

The hunters said, there, definitely, had been two or more animals at the scene, but all but one, may have been coyotes. The cougar, left his trade mark, and the hunters knew, very well, what they were after, when they tied the dogs that got their scent from the rear, and followed the others. That afternoon, the dogs treed the cougar, and it was killed. But, a few nights later, there was another kill. This time, the throat was not cut, but the neck, was broken. The hunters, knew at once, they were on the trail of a white faced bear, and a big one. The bear, seemed to have been following the cougar, and getting a free meal, after the cougar had finished. But when the cougar was killed, and Mr. Bear became hungry, and wanted some more of the food, he had learned to like so well, he was compelled to make his own kill, and he did it in the approved fashion of his kind, which was breaking the neck, with his huge paw.

The hounds, were of the same mind now, and soon were on the trail. That was when I became interested. I heard the hounds, about noon, and they seemed to be getting nearer, all the time. Finally, they were so close, I decided it would be a good plan, to get inside. Shortly after one o'clock, I heard a great crash, down the hill from the barn, and an enormous, white faced bear, came loping through, between the house and the barn. If you think a bear can not run fast, you should have seen that fellow go. The dogs were not far behind, and they put him up a tree, about four miles from my place. and the killings were stopped.

There are herds of coyotes there, the same species as were in Iowa, but these, ran in packs, and would tackle a two year old calf. Where, one would have trouble, catching a

deer, the pack, would have less trouble, because, they would make the chase, in relays.

There were no rabbits of any kind, probably, because of so many predetoty animals.

There were a few squirrels, but their flesh could not be eaten, because they lived on pine cones, and tasted so much of purpentine, it was very offensive.

There was a little, squirrel like, animal, called the chip monk, who stayed around the homes, and put in most of his time, tormenting the dogs. He would get on a rail fence, and start his, chip-chip- chip, and the fool dog, would think he could catch him, but, could never get the little fellow cornered. He derives his name, from the sound of his call.

There are but one kind of snake, there, that I ever saw. And that is an enormous, rattle snake. They, sometimes, are as much as eight feet long. I had the good fortune, to witness a battle of the wilds. I was out, hunting deer, and heard a noise, near by, in a small section, that was clear of timber. Advancing, with caution, I saw a deer, prancing around, in a very peculiar manner. Ocasoinally, he would spring into the air, and light, with all four feet, closs together, and amediately, spring away. Finaly, I saw a huge snake, make his strike, and the deer made his spring, lighting, squarley, on the snake, before he could coil, for another strike. They were having a battle, to the death, and the deer won, cutting the snake, all to pieces. I was hunting deer, but I let that fellow go. I told some of the natives about it, and they said it was common, that the two never meet, that one, or the other does not die, and many times, both of them.

There were numerous porcupines there, and they were safe, from man or beast. from the other animals, because they were afraid of their quills, and from man, because, they are harmless, and are eisaly captured, when needed for food. It has been said, they can throw, their quills, but that is not so. Their quills, come out easily, but will not do so, unless the point penetrates some substance then, it will come out, and will be very hard to remove, because there is a small beard, or hook, on the end, and will soon cause trouble. They say, they are good eating, and I do not see why they should not be, for they are a clean little animã, and are a vegetarian. They have saved the lives of many people, who were lost in the forest, and ran out of food.

There is very little rain, in fact, it seldom rains, at all. All the moisture, there is, comes, in the form of snow, which generally starts falling, in the Month of September. The first snow I saw, ~~and~~ ^{was} the fore part of that Month, and continued, almost without stopping, until the next March. It started snowing, about four O'clock in the afternoon, and the next morning, there was four foot of it. It was so soft, one could walk on the ground, through it. I soon discovered, one could not walk very far, nor very fast, without becoming exhausted. I had to take my stock to the canyon, for water, I was riding one horse and leading the other, with the old cow, following. The one I was riding, soon began to show signs of tiring, and I let him stop, to rest, and the other one, took the lead. Soon, he had had enough, and stopped to rest also, and the old cow, went by, and broke the path, all the way to the spring.

The ground never freezes. The snow comes, before it is cold enough, and the snow melts from the bottom, all winter, the water soaking into the ground, storing moisture for the next summers crops.

The natives were using snow shoes, about four feet long, to travel over the soft snow, and they sank into it so deep, there was no sliding motion possible. I had seen pictures of skis, and they looked to me, as though they were very long. I split two pieces of tamarac, and trimmed them down, to about four inches wide, making them, very thin, so they would be as light as possible. They were eight feet long. I fastened them to my feet, and went out, to try them. They worked perfect, and I was making skis, all winter.

If the snow did not melt from the bottom, there would be 25 feet of it, by spring. As it was, it covered the stakes, of a ten rail, stake and rider fence, in front of my house, and there is no drifting, because of the heavy timber.

The weather, is very changable, even in the summer time. I have seen the thermometer standing at 85 degrees F. at two, in the afternoon, and a white frost on the ground, the next morning. They said, that was the reason, so many horses, die, of the Mountain fever. One never starts on a trip, without a top coat, even, if he is going no more than a few miles, for, if the sun is obscured, for two hours, he will need it. The nights, are very cold.

In March, the Chanook winds start blowing, and the snow disappears like magic. These winds, are not strong, just a pleasant breeze, but they sure melt the snow. The second day, after they start, the canyons start roaring, with the snow water. They derive their name, because of blowing over the Chanook Indian Reservation. In a few days, the snow is all gone, and all the moisture we are going to have, to grow the summer crops, we already have. The only crops raised there, is winter wheat, and rye, which is also planted in the fall, barley, for hog feed, and oats, for horse feed. There is a great deal of wheat, cut while it is still green, for hay, there being no hay crop.

I tried to raise some sweet corn, but the frost killed it, before it was large enough to ear out. There are a few potatoes grown, for home use, but none for market.

Up to 1890, most of the grain was harvested with headers. A machine that cuts the heads off the grain, and leaves the stalk standing. It cuts a 12 foot swath, and elevates it into a header bed, that is located on a wagon, driven along with the header, and when it is full, it drives out to the stack, and another one takes its place under the shoot. The header is pushed by four horses, two, on either side of a long sweep, or beam, extending from the rear of the machine. This beam, has a rudder wheel, under it, something like a caster wheel, controlled by a lever attached to the staff, that passes through the beam. It is called, the jacob staff, and a man stands astride of it, guiding the machine, at will.

About the time I went there, the farmers were beginning to realize the value of the straw, and were changing to the self binder.

Denny Maden, bought a binder, and the man came out, to set it up, and went back to Town. After a while, it stopped binding, and no one knew what was the trouble, so Denny put a man on a horse and sent for me. When I saw what was the trouble, I ask if they had any twine, and that was the first the knew, what that stuff was for. I threaded the machine, and started it up, to see if it was alright, and Denny, would not let me go home, he insisted that I stay, and cut the whole crop. I cut 400 acres of wheat, for him, keeping on the job, from sun up, until sun down, stopping to eat lunch while the men changed the teams. I never touched a horse, during the whole time.

The men would have the team hitched up, when I got there in the morning, change them in the middle of the fore noon, at noon, and again, in the middle of the after noon. It was not so long, from sun up, to sun down, as you might think. The mountains were on all sides, and we had more than an hour, after day light, before the sun came into sight, and the same length of time, after the sun went out of sight, in the evening, before it was dark.

I seemed to be called on, to head every project that was launched. The neighborhood wanted a School, and there was a meeting called, and I was chosen to go to Union, with a petition, to the County, School Board, to find out what could be done.

After seeing the petition, and learning the number of children, there were to attend, they gave me permission to build a school house, but would not agree to share in the cost of its construction, but would agree, to furnish a Teacher, after the building was finished. So, we chipped in, and put up a nice little school house, and again, I was chosen as director. I obtained a Teacher, and when she came, we had to board her.

The settlers, further back, wanted a road, to their section, and again, I was sent to Union, to interview the County Board of Supervisors.

This time, I had better luck, the board agreed to do all necessary work on the new road, If, three teams, were hitched to three lumber wagons, and were driven over the proposed road, each way, without doing any preliminary work on it and, this accomplishment being reported, to the Board, in writing, over my signature. They would, at such time, declare it a public highway, and immediately take steps, to do all necessary work of improving same.

We made the trip, but in doing so, were compelled to take down 150 feet of rail fence, on each side of a forty acre tract, which belonged to Mr. Milenburg.

He wanted us to go around it, which would make the road a half mile longer, and I knew, the Board would not stand for that. When we returned from the end of the proposed road, Mr. Milenburg, had put his fence back up, and was sitting on the top of it, with a rifle in his hands. He defied us, to take it down again.

Being quite sure, it was a bluff, and that he would not attempt to use the gun, I walked up to him, and after a few moments talk, he helped us take the fence down, and

agreed to leave it down. He, just did not understand.

The idea of requireing the teams to travel over the road, was due to the fact, there are so many canyons, traversing the country, in avery direction, unless this stunt was done, there might be a road layed out, that the cost of making it useable, would be prohibitive, unless the surveyers were brouhgt the place, which, in thet country, is very expensive, because on the mountamous conditions.

Some pages back, I mentioned the man Risdom, who tried to jump my claim. My troubles with him, were not over. My land, joined his, for three quarters of a mile, and, there being no herd law, there, all crops must be fenced in, to protect them from the range stock. I had crops in part of my land, that adjoined his,; He came to my place and proposed, we join fences, at each end of our mutual line, and save the three quarter mile, of fencing, saying, he was going to plant barley, on his. This, was common practice there, and I thought he had forgotten his gripe, and wanted to be neighborly, so I agreed to it. He did not plant barley on his, nor any thing else, but turned his milch cows in, and took particular care to have his girls, drive them over my wheat, at every oppertunity. I stood it, for a while, until the wheat had grown enough to be damaged, by the cattle tramping on it. I stopped the girls, one evening, and told them, to go home and tell their Father, if he wanted the cattle driven over my wheat, any more, to do the driving, him-self. They rode away, yelling like a bunch of Indians. In a short time, here came Risdom, and his 21 year old, Son, The old man, came by way of the road, but the boy, came cross lots, and through my garden. I caught him in the middle of the garden, and made him get off his horse, and lead it out, between two rows, and by that time, the old man, had climbed over the fence, and I made for him. When he saw I was comming, he climbed back, and told me, to come out into the road.

I started over the fence, when he saw Father, comming out of the house, and said he would not fight the whole Family. I told him, if I had a boy the size of his, and he could not handle that old man, I would disown him. But, they jumped on their horses, and rode away, he, sayong he would meet me, some time, when I was alone.

The next morning, which was Sunday, July the ~~thir~~^{fourth}, I was taking me, cow to the pasture, when I heard a horse comming. Looking around, I saw Risdom comming.

He jumped off his horse, and grabbed up a rock, in each hand, and made for me.

I tried to talk him out of it, but he was like a wild man. I was not concerned over the outcome, for when I saw he was arming himself with rock, I knew, he was a coward. He was too mad, to have any sense, any way. When he was quite a way from me, he threw one of the rocks at me, with his left hand, thereby, informing me, he was left handed. He did not have time to transfer the other rock, to his left hand, and when he struck at me with it, I knocked it from his hand, and landed, squarely, on the point of his chin, with my fist. He went down, like a polled ox, and the fight was all out of him. I lit, on top of him, not intending to give him a chance to re-arm himself.

I picked up a good size rock, grabbed a good hold of his hair, and turned his head over, so he could see it, and told him, I really believed, he had intended to kill me, and probably would have, had I been soft enough to let him get the better of me, but, now, it was my turn, and if he had any thing to say, he had better start talking.

I believe, the poor devil, really thought I was going to kill him. He promised me every thing "I" could think of, even to put up the entire line fence, between us, but all I wanted, was for him to keep his cattle off my wheat, and he promised to do so. Finally, I told him to get up, and go home, but, he could not get to his feet, and could not stand, when I tried to help him, his legs were like rubber. I went to his home, and told his boy, he had better hitch up a team, and go over by my pasture gate, and pick up his old man, who is laying over there in the road. The boy ask if I had killed him, but I told him, his dad was not hurt, just scared. But he insisted that I go with him, so I did, and helped load the brave man, into the wagon.

I think, the truth of the matter was, he had, intended to kill me, and now, that the tables were turned, he was afraid I would do the same to him. He was not a murderer at heart, but had an uncontrollable temper.

That darned kid, rode all over the neighborhood, telling every one, the little yankee, thrashed hell out of Dad, this morning. seeming to get a great kick, out of it.

The little yankee, was a name I picked up, out there, I never knew why.

Monday morning, my Wife and I, drove to Elgin, where they were holding a belated Independence day, celebration, we were riding in a two wheeled, mountain cart, and

when we drove up to the hitch rack, in Elgin, a crowd of men and women, gathered around us. Some of the men, tied the horses to the rack, while others pulled me from the cart.

My Wife was very much scared, and I did not know what was up, but the women assured my Wife, no one would be hurt, and escorted her into one of the stores, while the men carried me, to a near by, saloon. To my great surprise, they had Risdom, there, and they made him get on a pool table, and make a speach. I really felt sorry for the poor devil, but he did a prethy good job of it, and seemed to satisfy the crowd, and they, all took a drink, at his expense. When they were through with him, he came to me, and said he entended to keep all the promices he had made, and wanted to shake hands.

He told the crowd, as far as he was concerned, we would be friends, from then, on. If I had have been a drinking man, I would have been stone drunk, a half hour after I arived in Town. When we were ready to go home, I had my pockets filled with cigars, and my Wife was loaded down with candy and hiok-nacks. These people were any thing but cowards, but, for some reason, the man had them bluffed. It seems to me, if I were as much despised, as he was, I would get out of the country, as fast as possible.

I never had a better neighbor, than he was, after that.

I have found, a great part of the bravado, of the earley west, was bluff. If a man was ready to back up his words, he did not talk about it. he went to work, and if his aponent was not ready, it was too bad for him.

Many, if not all, that had their gun stocks falled with notches, would not kill a flea. If a man was exceptionly fast on the draw, he kept it to him self. If he did not, and was fool enough to brag about it, he was sure to find some one who was faster.

I bought three cows, before I found one, that was tame enough to be broken to be milked. [I kept her in a pasture, not far from the house, so I could find her, at milking time. I went after her, one evening, and she was not to be found. thinking she had broken out, and wondered off, I rode the range, for the next three days, looking for her. but could not find her, and gave her up, as lost. It never occured to me. she had been stolen. I had to make a trip to High Valley, and was gone for two days. when I returned, the cow, was in the corral. My Wife said she heard the bell, the evening after I had left, and when she went to the pasture, there she was,

Nettie thought she would try milking her, to see if she had dried up, and she gave her regular amount. When I heard that, I knew, she had been milked regularly.

Some one had stolen her, and brought her back, but I could not think, who it could be.

About a year after that, I was in La Grande, and went into a small restaurant for lunch, and heard some fellows talking about a hunting trip. One of them remarked, he would like to have a cow, like they did last year, and another said he had always felt guilty, over that deal. He said, there was no telling, how much trouble it may have caused the owner. That, was ample proof, of who had stolen my cow.

I wondered over to their table, and told them I wanted to thank them, for bringing that white cow, they barrowed last year, back when they were through with her, for I knew very well, some fellows would have turned her loose, when they were through with her, and I would never have seen her again. When I said, white cow they knew, I was the owner, and one of them, wanted to know, how much they owed me. I told him how long I had hunted for her, but, that I was so much pleased, they had returned her, I would let them, set the amount they thought it was worth. One of them, wanted to know, if \$25.00 would be enough?.. I told them, I would be glad to except that amount, under one condition. They would not do the same thing, this year, and they promised, not to.

I built a log barn, and the greatest trouble I had, was to get logs, that were small enough. I finally located a pine thicket, where the trees had grown so close together, they had grown, very tall, and slim. After cutting a road to them, I cut down three trees, before I got one, to the ground, there was no room for them to fall..

After making a logging cart, I hauled a lot of them home. They were about 8 inches through, at the but, and when cut to a length of 70 feet, were about 6 inches through, at the top I was building my barn, 30 by 40 feet, and one tree would make a side log, and an end log. By notching them, at the ends, I had, very nearly, a tight wall. I layed them up, until the walls were 12 feet high.

There were some, very small trees in this group, and they were just the thing, for rafters, and stringers. I split tamerac logs, into strips, to make the up-stairs floor, and for sheeting, to nail the clapboards to, using the latter, for shingles. In laying up the walls, I cut in, logs, for partitions, and cut out, logs, for the doors, and

left an opening, on one side, to drive into it. One end, had stalls for 4 horses and a cow, and the other end, had a place to keep my grain and feed, also a place to keep my chickens. up stairs, there was ample room, to keep my hay. It required a long time to build it, but when I had finished it, I had a real barn, and I was proud of it.

I wish to tell of an incedent that happened in that barn. One night, I heard the chickens making a fuss, and lighted a lantern, and went to the barn, to see what was going on. I went in the drive way, and set the lantern, inside the chicken room, and could see the eyes of some animal, shining. There was a very strong oder of skunk, and I removed the lantern, and hunted me a nice club. Going back, with the lantern, I could see mr, Skunk, in the same position. Setting the lantern on the floor, I sneaked around the side of the lighted space, and carefully, I raised my club, thinking I could give him a good crack on the head, and get away, before I would get stunk up, I gave him one whack, and screamed, out of there.

The next morning, I went, to see my kill, and emagine my surprise, to find I had killed a wild cat. When I saw what it was, my hair stood streight up. If I had have known what it was, money would not have hired me to go in there. The skunk oder, was still there, but it was comming from some other source, than the chicken pen.

My vivid emagination, started working, as you will see, from the following;
The Blacksmiths, were using charcoal, in their forges, there being no smithing coal, available. Charcoal, was selling for 25 cents per bushel. The reason for it being so high, was the fact it was being cut into cord wood, before being placed in a burning position, and splitting pine logs, is the devels own job. It was then, stacked into pyramids, and covered with brush, and ~~earth~~. They did not dig a pit for it, as Father said, they use to do, in Ohio.

There is where my emagination started working. I had never burned any charcoal, nor had I seen any burned, but I thought, if a small piece of wood, would char, clear through, without burning up, a larger piece, would do the same thing, if kept in the heat longer, without letting any air get to it. It was worth trying, at any rate.

I dug a pit, 12 feet wide, 14 feet long, and 2 feet deep. I thought it would be easier to controle, if it were in a pit. I hauled a lot of logs, from the same place I got my

barn logs from, cut them the right length to fit the pit, rolled them in until the pit was full, and stacked them, a log between each two, below it, until they came to a peak. Not forgetting to taper them at the end, so they would have the same slope on the end, as the sides, so the covering would stay in place. I cut two logs, shorter than the rest, and placed them in the center, at the bottom, so I could use the space for a fireplace. When I had it all filled, I covered it with pine brush, and on top of that, I put pine needles, and lastly, dirt, leaving a hole in the rear top, for a sort of a chimney, so I would have a draft, to start it burning, and started the fire. It took a long time to get it hot, but when it did, get hot, it took it a damned sight longer, to get it cool. That pile of logs, was an inferno. After plugging all the holes, there was an untold number of fresh ~~XXXX~~ ones, breaking through, all the time. We had to watch it day and night. Father, watched it part of the time, while I slept on the ground, near by. I did not dare leave it, for fear it would get the better of Father. We spent two weeks with it, before it was cool enough, so we dare leave it.

When it was cool, I uncovered it, and the logs were just the same as they were when we covered them. Except, they were black, and the first thing Father said was, there goes another one of your bright ideas. It certainly looked like a complete failure.

I told Father, they might be better, near the bottom, and rolled the top log off. When it struck the ground, it broke into several pieces. It was charred clear through. And all the rest, proved to be the same. Instead of being a failure, it was a complete success, and was of the very best quality. I hauled a load of it to the Blacksmith in Elgin, and he pronounced it, the best he had ever seen, and wanted to know how I got it in such big chunks.

I prepared to burn another pit, and by the time I had sold the first one, I had another one cooling. I sold 600 bushel, from the first pit, and received \$150.00. Not bad, for an idea, if I could have kept it a secret, I could I could have made a little money, while I was living on the claim, preparatory to proving up.

We turned the second pit out, with much less trouble, than the first, and it was much larger. I figured to get 1200 bushel, from it, but we never sold all of it.

The charcoal burners, all over the country were using my method, and the price had

dropped to ten cents, and I gave up the whole idea.

There was no money to be made, on the small acreage I could farm, and the inconvenience of hauling water, two or three miles, during the greater part of the year, became tiresome, and when the chance came, to sell, at a reasonable figure, we decided to sell;

After I sold the place, we moved to Union, where I obtained a position as night Engineer, at the local power plant. The regular Engineer being sick. I was there, about six weeks, when the regular man returned.

It is a peculiar thing, how people will grab onto something, after some one else has shown them the way. While I was doing nothing much, I drove away back, into the foothills, to see if I could find some fire wood. I ran across a pine thicket, something like the one, from where I obtained my barn logs. This one had been burned over, and the trees were all, dead. When pine, dies on the stump, it retains all of its pitch, and makes a very hot fire, and that, is what I had a load of. I had no more than gotten into Town, when a fellow stopped me, and wanted to know, if I would sell it, and offered me, \$5.00 for it. which was not bad, for a days work, at that time, and I sold it to him.

I went back, the next day, and got another load, which I sold, for \$7.00. People were crazy for the stuff. I kept on, hauling, for about a week, selling it, as fast as I could bring it into Town, without any trouble.

The next Monday morning, when I arrived at my patch of timber, there were a half dozen teams, there. loading, from the place I had opened up. Of course, they had just as good a right to it, as I did, but it was a sneaky way to beat me out of it.

One fellow had followed me, on Saturday, and told a bunch of his friends, about it, so there would a bunch of them, in case there was trouble. I knew I did not have a chance. The price, soon dropped to \$1.50 per load, and no one could make any thing. My little business was gone. If they had have left me alone, I could have had, a nice little business, but some one must but in, and spoil it.

We decided to go back to the States (this is an expression, used there: a great deal) and having a note falling due in a short time, in payment for the team I had sold, we

thought it would be better if I went first, and found a location, while my Wife 49.
would stay with her Brother Johns folk, until she could collect the note.

I arrived in Sioux City, on Friday, the thirteenth, and put up at a boarding house, on fourth Street. When I joined the rest of the boarders, for supper, that evening, I found, there were nine Engineers, besides my self, and four of them, were out of work. Not very encouraging, and they advised me to move on, while I had the money to do so. But I went out to look for a job, Saturday morning, and came home that evening, with a job for myself, and two, to spare. I told the boys where the two jobs were, that I could not take, in case they wanted them.

The first two jobs that were offered me, did not suit me too well, but I would have taken one of them, had I not have found one that suited me better.

I had decided to take the one I found last, which was an industry, being installed in an old shoe factory. It was to be a tow, manufacturing plant.

The man I contact, was a Belgian, and wanted the same race of people, to work there. I could see very plainly, if an Engineer were needed any place, it was there, but the old fellow who seemed to be in charge, said they did not need one. I surmised, there was something wrong, and made it a point to find out who the big man was, and discovered it was Captain Geer, who was also Manager of the Sioux City Linseed Oil Mill.

I went, to see him, and we had a long talk. The Captain, was a Civil Engineer, and while we were in different fields, we were both, Engineers, and had many things in common, which placed us, more or less, on the same footing.

After giving me a short examination, and being assured, I could obtain an Engineers license from the City, Board of examining Engineers, he engaged me, for a period of one year. He gave me a letter, to present to Mr. Bossie, who was in charge of the plant.

The letter was to inform Mr. Bossie, I had been engaged to install the machinery, and to operate the steam plant, when the factory was ready to start operations. The most important part of the letter, in my estimation, was the item that told him, I would be, in full command of the work, and would engage my own help, for the installation work.

The Bossie outfit, consisted of, Mr. Bossie, and his two Snes in law, Mr. Hanset and Mr. De Wals. They proceeded to make things as difficult as possible, but I attended strictly to my own business, paying no attention to their slighting remarks.

anyway, I could not understand, their general conversation, for, they talked nothing but French, which I do not understand. On Thursday, the Captin came to the plant, and had a long talk with Mr. Bossie. After that, I had a little more co-operation.

The plant was located in the notorious Floyd Valley, at the edge of the Town of Leeds, a suburb, of Sioux City. I say, the notorious Valley, because of the distructive floods, that frequent the place. One of which, happened while I was living there. Although, I live a mile from the twenty foot wide, Floyd River, I would come home in a boat, and land in my front porch.

In a short time, I had the machinery installed, including, the engine and boiler. I obtained an engineers lisenice from the board (which I still have) and the plant was put into operation. Upholstry tow, is the article we manufactured. It is made from flax straw, by passing it through a system of corogated rollers, which break up the straw, so the woody part, may be seperated from the fiber, by shakers and screens.

I used the woody part, called schiev, for fuel, under the boiler. And there not being enough to keep up steam, I used a small amount of coal.

Late in the fall, I ordered a car of coal, and when it came, the Bossies hauled some of it home. I thought nothing of that, for it was common practice, for the employer to furnish his men with their winter fuel, at cost price. I had to order another car, much suuner than usual, because of what they had taken, and Mr. Bossie was fool enough to complain to Mr. Geer, I was using an enormus amount of coal.

I never could understand why he chose that particular time, to try and lower the Captins opinion of me. If the coal was stolen. (which did prove to be the case) he might have known, there would be an investigation, and the truth would be learned. If he had have kept his mouth shut, they might have gotten away with it.

Mr. Geer, came to the plant, and ask, why I had been using so much coal lately? I told him, I was using no more coal than usual, and he ask why I had ordered another car, so soon after the last one? Naturely, I told him, it was because of the Bossies laying in their winter supply. This, seemed to come as a great surprise to Mr. Geer.

He wanted to know who had hauled it, and I told him, Billey Harsha, he ask for Billey, and when he came in, the Captin ask him, how much coal ha had hauled, Billey told him

how many loads he had hauled to each one, but could not tell the weight, because they had not weighed it, although there were a pair of wagon scales at the plant. Mr. Geer was hopping mad, for it was plain to be seen, they had not intended to pay for it.

He called Mr. Bossie in and ask him about it, and was told, they were going to report the next week, and have the money to pay for it, taken from their several, pay envelopes. But when Mr. Geer ask, how they would know how much to be taken out, for it was known, the coal had not been weighed, Mr. Bossie could not answer, and seemed to realise, for the first time, he was caught, red handed.

Mr. Geer, ordered the plant closed down, and demanded all the keys, from Mr Bossie. He told me, to stay at the plant, and take care of the shipping, and fired the whole Bossie outfit on the spot.

About two weeks after the Bossie episode, the Captin came out to the plant. I remember it so well, We sat down, on the steps, leading from the boiler room, to the engine room, and had a long talk. That, was when I discovered, the Captin was getting sick of the Bossies, when I showed up, at the Office, the first time, and was wondering what he was going to do about it, when I appeared on the scene, looking for a job, just in time to answer his question.

Finally, he ask me if I could get a crew together, to start the plant, the next Monday morning? I told him, that would be no trouble, but wanted to know who would be in charge, and he said, I would. I thanked him for the offer, but told him, all I knew about the tow business, I had learned in the short time I had been with him, but he said he was in the same boat, so lets learn it together. What can one do, with a man like that, but his very best?.

I was with the Floyd Valley Flax Company, for seven years. I installed many improvements, saving much labor, and improving the product, at the same time. I aranged the machinery, so the material was fed from one machine, into the next, automatically, aranged the bailing press so it would charge, every third stroke, enabeling me to feed the tow into it, direct, from the finishing machine. I installed a safty device, that would stop the machinery, by pulling, none, of many cords, hanging in convenient places, around the mill room. This device, surely, saved a mans life, later.

The insurance Compant complained about me being away from the boiler and engine room, too much of the time, leaving it in the care of a fireman, and the Captin sent a man from the oil mill, to act as foreman, in the mill room, under my directions; Mr. Clark, had some ideas of his own, and some of them were very good, but, I had given orders, to do no oiling, while the machinery was in motion. He thought it was a waste of time, and, without consulting me, ordered one of the men, to do the oiling, after the machinery had been put to work. The reason for this order was, there were so many gears all of which, were under cover, that, to lift the covers while they were in motion, was very dangerous.

The very first day, this order was put into exicution, Frank Brolin, who had been ordered to do the oiling, was caught in a large bevel gear, on one of the breaks, and his hand mangled to, above the wrist. The gear, caught his sleeve, and was, ruthlessly pulling him into it, when one of the men, pulled one of the safty cords, and the machinery stopped, amediately.

When the alarm sounded, I rushed into the mill room. I could not get any of the man to help me, they were so squeemish about the sight of blood. I had some alcahal in the engine room, and deluted some of it, and gave Frank a sip, ocasionaly, while I was working, to get him out. I could not get the machinery apart, and was compelled to turn it back, by hand, and pass his hand, back through it. It would not have been a long job, if I would have had help, but to do it alone, was quite a job. In the mean-time, I had sent a man to the livery stable, to order a carrage to be at the plant, waiting, so I could rush Frank to the Hospital, as soon as I could free him. I had, also sent a man to Franks home, to tell his Wife of the accident, and had told him, to be carefull as possible, and not scare her more then necessary, for I knew her to be in a delicate condition.

Frank stood up to the ordeal, like the man, he was, and when I got him loose, the team from the livery stable, was waiting, and we rushed him to the Hospital, in short order.

When we arived, the attendant told me to take him to the second floor. There were no elevators, and I started up the stair, with him. When about half way up, he colapsed. Did you ever try to pick up an unconsconscious man?, It was no easy matt er, but it had to be done, so, I did it, and carried him, the rest of the way up, and put him in bed.

Never in my life, have I seen a man with the nerve that Sweed had. He had stood the intense pain, for so long a time, and had lost a considerable amount of blood.

He made me promise I would stay with him, until the operation was over, and I did so.

After Frank came out from under the ether, he asked me to get his Wife, and I went back to Leeds to find, his Wife had gone. One of the neighbors told me, she and the two children, had boarded a Street car, about two hours before, and gone to the City. There was only two cars on the Leeds line, and the first one I contacted, was the one she had gone to the City on. The Conductor told me, she had gotten off, at fifth and Jackson, and had boarded one of the cable cars. There were a great number of the cable cars, and I anticipated a long search, but it was my only hope. If the crews had not changed, since she had made the trip, I would find the right one, sooner or later.

I was very fortunate in finding the right one, on the third car I stopped. He said he could show me, where the weeping Lady, and the two children had left his car, so I boarded his car, and he took me, nearly to the loop, before giving me the signal. He stopped the car and told me, she went up that path, and around that hill, designating the places.

I followed the path, and the first house I came to, I enquired for a Sweed Family, that might live near. The man, knew of no Sweed Family in the neighborhood, but a little boy, came to the door, and told his Father, there was a Sweed Family, moved into that house, right over there, a few days ago, pointing to a house, near by.

Going to the place, I knocked on the door, and when it was opened, I saw Mrs Brolin sitting at the opposite side of the room, and when she saw me, she went into hysterics. None of the people there, could talk English, and I could not get her to quiet down, until I slapped her on the face. I was very sorry, to have to do it, but it was the only thing I could do. This brought her to her senses, and she quieted down enough to understand, Frank wanted to see her. Frank was not dead, which she had imagined, and had asked me, to bring her to him, after finding out, what Miller had told her, I did not blame her so much. He had gone to her door, and told her, Frank was not hurt, but would not be home, and walked away. She was alright, after finding, that Frank wanted her to come to the Hospital, but I told her what had happened, before taking her into the Hospital, so she would not go to pieces again, at seeing what had happened.

After reporting the incident to Captin Geer, I went home, and the next time I saw Frank, he came to see me. I h@d wrenched my back, when I carried him up the stairs.

Frank had never saved any money, but of course, we gave him a job, as night watchman, at the plant. He held that job, for about a year, when he quit, and rented a small farm, and started farming. The last time I saw Frank, he had bought the 40 acres he had been renting, and was doing quite well. He had quite a lot of stock, and was feeling quite prosperous. He confided in me, that the accident had brought him to his senses, about saving.

I made many trips, to Dakota (which was one State at that time) buying flax straw, and investigating the prospective flax crop. These trips were made, at the joint expense, of the Floyd Flax Company, and the Sioux City Linseed Oil Company.

While on one of these trips, I noticed, there were but few seeds in the balls, on the flax. (for the information of those who do not know how flax produces the seed, there is many little balls, about the size of a pea, at the end of the stems, and the seed is in these balls) Normaly, there are 30 to 40 seed, in each one of these balls.

This particular year, there were not more than 10 or 15 seed in them.

The market journals were reporting the prospect of a bumper crop, but I knew, they were wrong. There were a plenty of balls, making it look like a large crop, if the investigation was not carried far enough. I had dreams of buying a lot of flax seed, on a margin, and making a fortune, but I lacked the nerve. However, I reported my findings to the Captin, but he thought the Agriculture department could not be that, wrong.

He told me later, his Company could have made thousands, if they had listened to me.

In 1897, the Congress passed a bill, removing the tariff from the waste materials, in the linen mills in Europe, they had been burning. This material, was a better up-holdtry medium, then we could make from the raw straw. It could be bailed, and shipped as balast, and any thing they could get for it, was clear profit. our business was completely killed. The cordage business had never materialised, and the Captin was compelled to close the plant down. I could tall of many things that happened, at that place, after it was abandoned, but not many of them, would be interesting, to a stranger.

One of them, was the disappearance of a straight flax thresher, I had designed and built, together, with several hundred Dollars worth of leather belting.

My Wife and I, had no children, and when we heard, there was a little girl, at one of the Hospitals, in the City, we went to see her. Her Mother, could not keep her, and we were so pleased with the little darling, we took her home, and adopted her. She was only two days old, when we took her. This, was year of 1893, and she was born on the third day of November, of that year. We named her, Hattie Ethel. She was a great source of pleasure, to both of us. I made a seat on the handle bars of my bicycle, and she rode in it, many a mile. She was the best little youngster, I have ever seen, giving me no trouble, any time. Hattie (now Mrs. Ernie Strunk) lives in Phoenix Arizona.

She is the Mother of two, fine men, and is a great Grand Mother. I receive letters from her, quite frequently, and still have her picture, taken when she was a little girl, the way I like to remember her.

After the tow mill closed down, I had no steady employment. Times were quite hard. and I was compelled to make my own job. I started a feed mill, in an abandoned school house, to get by, the first winter. It was while I was operating this mill, that I discovered a way to extract the sweet, rich part of the corn kernal, and make it into meal, for the home kitchen. It was so delicious, I thought it could be, profitably marketed, and delivered a few sacks, to some of the merchants, in the City.

After the people had sampled it, I could not supply the demand. My great trouble, was to dispose of the balance of the corn. I could get no more than 15 pounds of meal, from a bushel of corn, leaving 41 pounds, to be disposed of, as feed, and the feed market was limited. While I was in the meal business, I made a contract with a feed dealer, in the City, for five tons of chop feed. This gave me a chance to produce quite an amount of the special meal. Naturely, I must have oats, to mix with the corn, to make chop feed, and went into the country, to buy them. I bought all, I needed, for seven cents per bushel. The farmer, was to start making delivery, the next day, and when he came, with the first load, I noticed, there were several teams.

He had ask some of his neighbors, to help him, for fear I would not take them all.

if there was any delay. I mention this, to show what a bad condition, the market was in, at the time. Grain, was selling at an unheard of, low price, and there was no market for it, at that. those were the days, when Clxies army, came marching through the Country, on their way to Washington. One could buy the best coffee on the market, for nine cets per pound, cured ham, was selling for ten cents per pound, and common labor, was getting $12\frac{1}{2}$ cents per hour, if one could get a job. I use to go out in the fall, and get a job, running a thresher engine, and would get \$ 3.00 per day. Every one said, I was making more than the owner. The only reason I could get that, was the fact, there was a law, requiring a licensed Engineer, to be in charge of all steam aperature.

I signed a contract with the Leeds Brick Company, to manufacture their brick, and put them in the dry racks, for \$2.00 per thousand brick. My Brother and I, put the plant in first call order, as far as the manufactureing part was concerned, and started making brick. We had 4 hundred thousand in the dry-racks, when they colapsed, ruining every one of them. The plant could make 20 thousand, per day, so we had several days work, represented, in the loss. The Company would not pay for them, although, the dry racks were their responsibility. I was going to sue, when I discovered the Company was insolvant, and any money I paid, for Court action, would be, just that much more lost. I could have gotten judgment, but that does not pay grocery bills, and that was what the men I owed, were interested in. It was customary, for the employer to make arrangements for his help, to get their groceries, on his credit, and I had done just that, and owed some large bills, as well as quite an amount, to the men, direct. I was completely broke, and was nearly a thousand dollars, in debt.

I had an old threshing machine, I had bought for junk, and the local Blacksmith, who I owed a large bill, told me, if I would haul the machine to his shop, he would help me fix it up, and I could buy an engine, on time, and make a bid, for the fall threshing. The boys who had worked for me, at the brick yard, wanted to clean up the mess, for nothing, but, owing to the Companies financial condition, I said no. Mr Goslin, the Blacksmith, and my self, repaired the old machine, made a water tank, and made an extra long stacker, and I went to Lemars and bought a ten horse power, case engine.

and brought it home, and let it be known, I was available for the rye threshing, which came earlier than the wheat, and which the large threshing rigs did not like to bother with. My argument was, I had a small rig, and could get over the hills with more speed, than the large ones, and the bridges the large rigs must go around, were no problem.

The reason I had bid for the rye threshing, was to become known, before the wheat came in. I hired a good crew, and started the first five jobs of rye, and when we had finished the last of these, there was nothing in sight. We felt pretty low, when a farmer who had 400 acres of wheat, came to me, and wanted to know, if I would come to his place and thresh one day, and not expect to come back later, to finish the job?.

It was customary, for the rig that started the job, of threshing from the shock, was entitled to come back later, and do the stack threshing.

I told him I would, if he would agree to have enough help, to keep us busy, from sun-up, to sun-down. He wanted to know, how many teams I wanted in the field, and I told him, at least, six. He thought it was foolish to have that many, but agreed to have them available, in case we needed them. The general idea, seemed to be, I had a small rig, and could not thresh, very fast, and I wanted to prove, they were wrong.

We started at sun-rise. There were four teams loaded with bundles, and by the time, the last of them was unloaded, the first two, were not more than half loaded; I started blowing the whistle, for more grain, and the farmer, rushed two more teams into the field. But, all six of them, could not keep us busy, and he rushed extra pitchers into the field, to help load. By this time, the whole crew had caught the fever, and joined in the sport.

One of the neighbors came to me, and wanted to know, if I was sure, there was no grain being wasted. I told him, that was a good question, and ask him to get some of the other farmers, and go to the back of the machine, and see if they could find any grain going over. They did so, and came, to report, they could find nothing.

He, finally got enough help, to keep us going, most of the time. My men were on the war path, for they knew as well as I, this day, was the crucial text, and our performance, would determine, whether or not, we would have a successful falls work.

The only talk one could hear, at the dinner table, was about the wonderful speed, that little machine could get away with the grain, and not the least of it was, that it was not wasting any of it.

We threshed 25 hundred bushel of wheat, that day, and when I pulled the rig into the yard, and stopped for supper, the farmer told me, he had changed his mind, and would like to finish the whole job, while I was there. I was compelled to tell him, it would be impossible, for I had booked enough work that day, to keep us busy, at least, three weeks. All right, he said, I will stack the rest of it, and you can come back, later in the fall, and finish it. No one else is going to thresh for me, if I can get you.

[I had ask Jonnie Crewman, who had a large amount of wheat, for his job, erlier in the fall, and he had answered me, with a loud gafaw, do you think I would have that little coffee mill, thresh for me?. That remark, was heard by several people, and it gave my rig, the name, of the coffee mill. He had done me, a great favor, for it went by that name the balance of the fall. We had help, from all sides. The wheat buyer, at the mill, where all the wheat was sold, Declaired, he could tell, just where the coffee mill was at work, because the grain was cleaned, so much better. The local news paper, had an article in every issue, concerning our progress.

We were threshing on the east bank of the Floyd River, when a deligation from a district, known as the Perry Creek district, were comming, to see if they could get us to come to their section. They had just crossed the River, when they noticed, we were getting ready to move, from one setting, to the next, and waited, to see how long it would take us. They had heard, we were so quick on the move, they wanted to see, for themselves.

After we were at work on the next setting, they came up, and the first question they ask was, were you moving, on a bet, or something?. I told them, If we were, I knew nothing about it, and ask, why they ask such a question. One of them, wanted to knwo, if I knew, how long we were, and I told him, I did not, but we were not in the habit of wasting time, on the move, for there was no money comming in, while we were doing that?. He said, they had timed us, and, from the time, the belt hit the ground, until we were threshing, at the new location, was just eleven minutes.

When one gets the people to talking about their good qualities, there is no better advertising possible. By the way, we threshed for Jonnie Crewman, late in the fall.

We moved to Perry Creek, and threshed that entire district, which had always been done, by Ben Dean.

We pulled in, through a foot of snow, a Month after all the other rigs had finished.

We made many friends, and if we made one enemy, I do not know of it. I had adapted the system of making a settlement, immediately after finishing a job, while every thing was fresh in our minds, and taking a note, or the cash, which avoided any argument, later.

I offered two percent discount, for cash, and had no delinquent bills.

We had taken the best, out of the old machine, and when Mr. Miller offered me \$500.00 for it, he bought himself a threshing outfit.

The only time we stopped, during the fall, was when I went to Des Moines, to see my Brother, who had just came back, from the Spanish-American War, and was very sick, with typhoid fever, and I stayed with him, until my Sister Nettie arrived.

I had made enough money, to pay all my debts, and had enough left, to keep me from worrying, about the coming winter. And, that was the end of a profitable fall's work.

The next spring, I saw an add in the Sioux City Journal, wanting an engineer, to take charge of the City water works plant, in Fonda Iowa, and the applications were to be considered, the very next day. I boarded the train, the next morning, and headed for Fonda, Arriving, there about ten A:M: and proceeded to find out, who the Town Dads were.

I visited the Mayor first, and learned the names of all the Councilmen.

The Mayor, informed me, that L.S. Straight, was Chairmen of the Water Committee, and he was the first one I called on. He, and his Brother Guy, operated a brick and tile Factory, which was the only major industry in Town. We had a long talk, and he escorted me all over the Town, making me acquainted with the other Councilmen, all of whom, ask me to be at the Council meeting, that evening. I attended the meeting, and was ask to tell the Council, what my qualifications were. I did that, and showed them, a recommendation, that had been given me, by Captin Geer, when I left his employ.

I believe, this recommendation, is the shortest, on record, it reads. The bearer, Clyde A. Thorpe, can, and will, do any thing, he says he can. Analyze that, and see if any thing should be added. After I had finished my talk, the Council, passed a resolution,

employing me, for a period of two years, and giving me full charge of the entire system. I learned later, there were sixteen other applications, for the position, and my own, was the only one considered, which goes to show, there is nothing like personal contact.

Fonda, is a small Town, in Pocahontas County Iowa, at the junction of the C.M. & St. P. and the Illinois Central R.R.

I moved there, at once, and assumed management of the system.

This Town of Fonda, is the biggest little Town, I have ever come in contact with, And, it proved to be quite interesting, as well. If one, was on the level, according to their code, he would get along fine, but if he were inclined to take any thing, from one of their excepted members, dishonestly, he was in trouble. But, the method of acquiring, that thing, made all the difference, in the world. If it were acquired, in a card game, or any of their excepted forms of gambling, there would be no trouble at all.

I will acquaint you with some of their maneuvers, later.

There were a great many retired farmers living there, and all they had to do, was to meet every train, at either depot, and if the train was late, it gave them time to talk about the grass hopper times, and to condemn the latest project of the City Council, that would cost the tax payers any thing. I will now, relate an incident, that happened while I was there. There were two produce houses in Town, one of them, was quite a large concern, owned by a Mr. Beswick, and known, as the Beswick, Butter and Egg House, The other, was a small concern, owned, and operated, by Tommy Dunn, a little Englishman.

There was a law, prohibiting the killing, or possession, of prairie chickens.

Mr. Beswick, was a wealthy man, and had a lot of influence. He would be notified, (through the grape vine) when the Game Warden's agent was coming, and would be prepared for his reception, but Tommy, was a little fellow, and was not, of enough importance to bother with, except, to collect from. There were no chickens found, at the Beswick place, But, Tommy, had a couple, that had been left there by a friend, to be kept in cold storage, until the owner was ready to use them. The warden found them, and made the mistake of socking Tommy, \$25.00, without the formality of making an arrest, and taking him before a magistrate. This was, surely a mistake in that Town, and he soon found it

out.

Tommy, let it be known, and that evening, when I came up Town, to play a little pool, I noticed a crowd, in front of the Iowa Hotel, and stepped outside, to see what was going on. I had a billiard cue in my hand, and some fellow yelled, dont use a club, we can handle him, just let us get a hold of him, that's all we want.

The Officer was in the dining room, and this noise was sent, for his ears. Two of the fellows, were in the Hotel, with the Officer. They had been chosen, to do the talking. They ask him, if he could hear the comotion, and he said, he could, and wondered what was the excitement, and when they told him it was because of him, collecting money from Mr. Dunn, without due process of law, and illegally, he became quite concerned, and ask the fellows, what they were going to do about it, and was told, if the crowd got a hold of him, there was no telling what they might, do, and that was what they were there for, and if he cared to refund the money, they might, be able to keep the mob away from him, untill the train came in. He agreed to refund the money, and ask for their protection. It was recognised, Tommy had broken the law, and if the Officer had arrested him, and taken him before a Magistrate, he would have paid the fine, the owner of the chickens, would have re-imbursed him, and that would have been the end of it. But, the Officer had made the mistake of excepting the Money, without due process of law, which, to those people, ment the same thing as robing him.

They walked him around the outskirts of Town, for two hours. until train time, the mob, within hearing, all the time, making believe, they were trying to find him. knowing very well just where he was, all the time. And, strange to say, none of them were at the depot, when the train arived.

If any one, was ever glad to get out of a Town, it was that Officer.
I knew of several stunts they pulled, comparible to this one.

I soon discovered, I had a problem at the Water Works.
There was a four inch well, in the bottom af a fifty foot reservoir. This well, flowed into the reservoir, which was six feet in diameter, and was pumped from there, into the mains. The water would rise to a depth of 20 feet, in the reservoir.

To maintain pressure, and provide storage, there was a fifty foot tank, on the top of a fifty foot tower, making the top of it, 100 feet from the ground, which gave us 45 pounds pressure, to the square inch, when the tank was full. The pump would empty the reservoir, in twenty minutes, and it required forty minutes, for it to refill. making it necessary, to operate the pump, twenty minutes, out of each hour. I found, I could get a little more water, by operating the pump, at a very slow speed, but I could not run it slow enough, to keep it in motion, continuously.

In the summer, the demand for water, was so high I had to keep the pump in operation, twenty minutes, of each hour, during the whole twenty four hours, of each day. This necessitated the hiring of an extra man, for I could not stay at the plant, all the all the time. It was apparent, the flow, was getting less and less, and in a short time, there was not enough water, to supply the Town, although, we were on the job, continuously. Some thing must be done. By making inquiries, I learned, the well had been finished in soft sand rock, and a screen, had been placed at the bottom. It is a well known fact, that a screen in the bottom of any well, will corrode, and in time, stop it up, entirely.

I talked it over, with the water Committee, and recommended placing a small dynamite charge, at the bottom of the well. Telling them, it was entirely possible, it would stop the flow, entirely, but the chances were were about ten to one, it would improve the flow, temporarily, but would have to be repeated, occasionally. And there was one thing they could be sure of. There would have to be a new well sunk, and that, before very long. They gave me permission to place the charge, and I placed two sticks, at the bottom, the next day, and shot it. The increase in flow, was amazing, we could operate the pump, at full speed, until the tank was full.

This flow, kept up for a week, and gradually lessened, and within a month, we had to place another shot.

I met with the City Council, and gave them a detailed report, on their water supply, and advised them, to make arrangements, for sinking a new well, as soon as possible.

Mr. Straight, saw the situation, the same as I, and used his influence, to get the project under way, immediately. His factory, was dependant on our water supply, and a great part of the Town people, were dependant, on his Factory.

Not, only that, but the Town had no water of any kind, that was fit to drink, except the City water, and it would jepordize the health of the entire Community.

The new well got under way, in a short time, in spite of the howling of the retired farmer population, who could see nothing but a raise in taxes they thought was sure to come, if the City sold bonds, to finance the project. They did not realise, their insurance rates would increase more than their extra tax would be, if the water supply was inadiquet, for proper fire protection.

The former Engineer, had lost, stoled or distroyed, all the drawings, and other data, pertaintint to the water plant, and system, including the location of the shut-off valves, that would be in the mains, and I had no way of locating them. I would not have known where the mains were, if it had not have been for the fire hydrants. The water on the back Street was very fouel, and the water supply, prohibited me from flushing the mains.

As the City furnished water fro the I.C. Railway, I could not see, why the designer would not have installed a line, running from the return main, to the railway tank, instead of, direct, from the plant. I worked, with this in mind, when I made a dummy drawing of the system, as I emagined the designer would have followed.

The Engineers training, causes them, to follow certain ideas, and procedures.

Mr. Straight and I, studied the plan, and he lined up with me. In a short time, we had most of the Council, with us. The reason I went to all this trouble was, the only way I could be sure, was to dig to the mamins, in several places, where I had located these valves. on my drawing. The first place we dug, we had not gone along the line, more than ten feet, when we struck the valve, leading to the I.C. tank. It was closed, and when I opened it, there was a rush of stagnate water, into the tank, and the water in the back mains, improved. amediately, which was a great boost for my plan, of finding where the several valves were.

The next thing I tackled, was water hammer that existed, all over Town, when the pump was operating. The base of the pump, had an opening on each side. The pipe leading to the mains, was attached to one side, and, the other was capped, with a flange.

I obtained a large tange boiler, and ran a pipe from the capped side of the pump,

base, to the bottom of the range boiler, using it, for an air chamber, or cushion. The hammer, was completely stopped. These accomplishments did me no harm, in the opinion of the Public, and after all, that was who I was working for.

The bonds were voted, at a special election, and were sold, as soon as possible, and it was not long, before there was a drilling machine, on the job. They made good progress, with an eight inch well. The contract called for them to find a flow of 5000 barrels, every 24 hours, and the head, not to fall below forty feet from the surface.

At sixty feet, they struck a streak of Pirotopez of iron, and drilled two weeks going through a half inch of it. They could not ream the hole to take the eight inch pipe, and ask permission to reduce the size, to take a six inch pipe, from there, down.

The Council called a special meeting, and after a long discussion, ask for my opinion. I told them, the well being at a depth of sixty feet, and the contract called for a certain amount of water, to be available, at a depth of forty feet, that amount of water must be available, at that depth, regardless of the size of the hole below it. The results of reducing the size of the casing, was the responsibility of the drilling Company. If they could not furnish the required amount of water, at the contract depth, they would not be able to collect. Therefore, I would recomend, the Drilling Company, use their own judgment, and that, they assume all responsibility.

One Councilman, voted against it, that being Mr. Rock, of whom I will have more to say, later. The well was finished, and tested, to the best of our ability; And well enough to assure us of the required amount of water, and much, to spare. It was finished, in solid sand-rock, and required no screen.

While we were testing the well, the man, who was fireing the boiler, threw hot cinders too closs to the wall of the building, which was a frame building, covered with sheet-iron. At one Oclock, the next morning, the fire alarm, called me out, and when I neared the water plant, the building was a mass of flame. I could not get inside, to start the fire pump, and it burned to the ground. I operated the plant, in the open, for some time, and when the insurance adjuster came, the Mayor sent him to me, with a sealed note, saying, the Council would O.K. any settlement, I saw fit to except. It was an easy

mater, to settle with him, for it was a public loss, and every one would know, what kind of a settlement, the Company had allowed, and it would be the best of advertising, for them, to be liberal. The insurance money, was enough to put up a new building, not of wood, but a brick building, ten feet wider than the old one, so it would cover the new well. The City, gained very much, by the fire, but I was the one who lost. I had a chest of tools, that could not be replaced for less than \$200.00. My diploma, from the Engineering School, which I could not replace, for the School had gone out of business, long ago. My Shop release, which gave the grade, under which I was classified, and would have lost my Engineers license, had I not have taken it home, to put it in a new frame.

Mr. Rock, of whom I spoke, some pages back, had become Chairman of the water Committee, and his idea of repaying me, for the years of hard work, and worry, was to inform me, that, owing to the improved condition of the water plant, and the fact, it required less time, to operate it (my contract, called for me to be within call of the fire alarm, 24 hours of each day, seven days, each week) it would be necessary to reduce the salary of the present Engineer or, replace him, with a cheaper man. Of course, I told him to get another man, and, in the mean time, I would expect, my regular salary.

He hired a fellow, named Taylor, who was a common laborer, which was no discredit to him as a man, but certainly was, a discredit to him, as an Engineer.

Before turning the plant over to him, I ask him to examine every thing in the plant, and be sure it was in good working condition. He did so, and I ask him to sign a release, stating he had done that, and found every thing in first class condition.

I, immediately, went to work for Straight Brothers, as Engineer, and Supervisor of their Factory, at a salary, nearly double that I had been receiving.

Shortly after Taylor took over at the water works, he decided to change the leathers, on the pump plunger, which were practically new, and would last at least, a year. He pulled the pump casing out of the well, which was not at all, necessary, for the plunger, where the leathers were located, could be removed from the cylinder, by simply pulling the pump rods, out, without disturbing the piping. There was 20 feet of six inch pipe, below the cylinder, which he unscrewed, for some unknown reason, and dropped

it, into the well. He had not the slightest idea, how to recover it, and no one else seemed to be able to help him. The bull-headed Rock, would not ask for information, and I offered none. I would have helped them out of their trouble, had they given me the chance, for spitting on Rock, would not help the innocent people who would suffer, from the lack of water. Rock had hired a cheap man, and already, that man had proved to be, any thing but cheap. Rock wired the Company who had drilled the well, and received the answer, They were on a job in Minnesota, and would be finished, within two weeks. At that time, they would come, and get the pipe out; The cost would be \$500.00, plus the freight, both ways, which would be at least, another \$500.00.

The storage tank was half empty, and would be entirely empty, within 24 hours, unless the water was shut off, from the mains. If they did that, the City would be out of water and if they did not, the City would be at the mercy of any fire, that could break out, any time. There were no wells in the Town, to fill in, for drinking water, and to use the water from the near by, ponds, which was the only water, available, would be a direct threat, to the health of the community, Really, it was a desperate situation.

Frank Sairborn, a banker, and at that time, City Clerk, came to the Office, and ask Mr. Straight, to call me, and we would talk the situation over.

I made no comment, concerning their trouble. I was bound, to make Mr. Rock, come to me, or send for me. But, when Frank ask me to make a suggestion, I could not refuse to say, what I knew, was the only thing to do. I told him, there was but one thing to do, and if they had had an Engineer, that would have been done, long ago, but what they had, was a ditcher, who could not be expected to know what to do. The only thing to do, was to bring the lost pipe to the surface, put the pump together, and start pumping.

Frank wanted to know, if I ment to say, I could get that pipe out?. and when I told him, I could. He wanted to know, how long it would take, I told him, it might take 24 hours, but I did not think it would take that long. Frank turned to Mr. Straight and said, darnd if I dont believe, he can do it. and L.S. said. of course he can, did you ever see the credentials he carries?. I told them, the cost would not exceed \$50.00, including the tool I would have to have made, and the City should have that, anyway

Frank took the proposition to Mr. Rock, and that gentleman, turned it down, saying I wanted to cause more delay, because of my dislike for him.

That, was when the Town people took matters in their own hands, and declared they had had enough, and demanded, in no mild terms, that Rock give the order, without further delay. Rock, seeing the temper of the people, and knowing what they were capable of doing, in a case like this, gave the order, to go ahead. But, it had taken the rest of the day, to bring him to terms, and it would be just that much longer, before water would be going into the mains.

When I finally got the order, I was already to get to work, for I knew it would come, and had engaged men, for the job. While I was getting the tool made, at the local Blacksmith shop, I sent them to get a long cable, from the Tile plant.

We started the tool down the well, at ten O'clock that night, and at four O'clock, the next morning, I telephoned the Mayor, we were through, and for him to get his (so called) Engineer, to put the pump together. He ask me to stay, and to keep my men, until he could get there. When he arrived, he ask me to put the pump together, for he would not trust the man, Taylor, to touch it. He would guarantee, we would be well paid.

Taylor had not shown up, during the whole trouble, and never did, come back.

We had water going into the mains, at six O'clock that morning, and I thought, for a while, I was going to be mobbed. If there were a person that Town, that was not at the water works, that morning, they must have been sick; They all, wanted to shake my hand. The Mayor told me, if I would apply for reinstatement, he would see that it was done, and at a substantial increase in salary. I could not consider it, for I was under contract, to Straight Brothers, at a higher salary, than the Town could afford to pay, and I liked my work at the Tile Plant, much more than the water works. But I recommended a good man, who accepted the job, and he was still there, when I left the Town, several years later.

At the next Council meeting, they voted to give me \$100.00, clear, after Rock had declared, the job was not worth more than ten Dollars, but he had agreed to pay \$25.00 and would, but no more. Mr. Rock, lost his position, as Chairman of the water Committee, The Council declared the position vacant, and appointed another man, to take his place.

Incedently, we put the pump together, with the same leathers in it, that Taylor was trying to change. Showing, it was an experoment.

That, was the end of my association with the Town of Marvin, Now called Fonda.

My experience, with the Commercial, Ceramic Industry.

Through the center of the State of Iowa, there can be found, the most extaesive Building materials Plants, in the country, if not in the world, in a like area.

The reason for this, is the extensive deposits of Aluvian Shale, found, in the district. This deposit, is found, in the southern part of Minnesota, all through Iowa, and a part of Missouri. Ending, at the Ozark Mountains. Where there is a deposit of flint rock. This deposit, shows very plainly, it has been pushed there, by some, great force. There is layer, upon layer of this rock, laying at an angle of about 45 degrees, the top, pointing in a southerly direction. All through this mass, there are caves. Some of them are large, and some are small. There is straems of water running through the valleys, and through the mountains, as well. Sientests tell us, these caves, are the result of Ice, that was forsed along, with the rock, and melted, later, causing the caves. This, all happened, during the pre-historic, Glazier slide.

The shale, varies in make-up, some of it is soft enough to be worked into forme, as it comes from the deposit, and some of it, must be ground into dust, before it may be worked.

The deposits, very in width, also, some, are not more than a mile wide; They do not appear, continuesly, but in spots. There will be a space of several miles, where there is no shale, at all, then, there will be a deposit, seventy five, or more, feet deep, as though the flow, had filled up, a depression. There are many differant colors, from a bright red, to a dull grey, and some of it, will burn to a differand color, from the raw materials. Shale, is the best material known, for manufactureing building materials, and tile. In fact, there can be shapes made from shale, that cannot be made from surface clays. Surface clay, shrinks, in the drying process, but, none, in the burning, while shale, shrinks in the drying process, not at all, but does, in the burning. Therefore, surface clay forms, must be dried, very slowly, to prevent them from cracking. while, shale may be dried, very rapinly, and in excessive heat, and strong drafts.

shale will vitrify, at a temperature of 2200 degrees, F. while surface clay will not vitrify at all, but will fuse, at that heat. Shale, will take a beautiful glaze, while surface clay will not glaze at all. These are the reasons, the building materials industries, are located on shale beds.

The general practice is to mix the several strata, together, unless some specific color is desired. It may be formed into shapes, such as vases, by mixing the several strata, together, separately, into a plastic condition, putting them together, layer upon layer, knead them lightly, before molding, when they are dry, sandpaper them, with fine sand paper, and they will have a beautiful marble appearance, when burned.

I designed, and built many devices for improving the ware, as well as the method of manufacture.

The clay deposit in Fonda, was of the surface clay, variety, and required much care in the drying process. Large dry houses were required for this purpose, in fact, Straight Brothers, had three buildings, all of which, were 100 feet long, 50 feet wide, and three stories high. All floors were made of 4 inch boards, layed one inch apart. There were no doors, except at on the lower floor, and they, were hung from the top, and were closed, while that floor was being filled. It required seven days, for the ware to dry, in clear weather, and if it were damp, or rainy, much longer, and there was much cracked ware, at that. I mention these facts, to show how difficult it is, to manufacture the modern building materials, and kindred ware, the trade demands, with surface clays.

The plants that were located on shale deposits, could make a hollow tile building block, without loss, even when the drying was done in excessive heat, and strong draft. It is possible, to manufacture the ware, one day, and set in the kiln, the next, perfectly dry.

In the old days, all that was made of clay, was brick. The ancient method, was to soak the clay during the night, work it into a plastic condition, with a puging device, wheel it to the molders table, where he would force it into, well sanded molds, after which it would be dumped onto a smother, sanded lot, edged, the next day, and hacked, the next, if the weather was dry, and would stay in the hacks, until they were dry enough to be set, in the kilns; Many times, a whole weeks work would be destroyed, by rain storms.

When shale came into use, modern machinery was put into the game, and the Engineer, was needed, for the first time, in the ceramic industry. It was a hard job, convincing some of the old fellows, that a trained Engineer, knew more about modern methods, than the old fellow, who had never made a brick, with any thing, but the old, wooden mold.

The ever increasing demand for shapes for various buildings, soon interested the capitalists, and they knew the savings, an Engineer could make. I got into the game, when the use of shale first began, and grew up, with the industry. Naturally, this was the time, that new methods of accomplishing the various phases of manufacturing processes, were being designed, and tested.

One thing that made progress slow, was, the same old die-hards that I mentioned. If they did, hire an Engineer, and he saw a chance to make an improvement, he was required to submit his plan to the fellow in the swivel chair, and nine times out of ten, he would be turned down. The boss, would rather take the loss of being without it, than give his Engineer the credit, and after he thought it had been forgotten, would order the same device installed, and he, would take the credit, for the idea.

I am glad to report, these old fellows have been replaced, by the younger generation and they are progressive minded. Sure. the old fellows made their pile, with the old method. But it was because of the near, slave methods of getting their manual labor done. Man power, was the cheapest power known, I am thankful, that has changed,

I was asked to prepare and read a paper, at the Permanent Builders Convention, at Ames, Iowa, on the subject, of the Engineers problems, in the Brick and Tile industry, The request of which, was proof, the problem existed. My great desire, was to make the lagging manufacturer understand, the value of his Engineer, who, if he is worth any part of his salary, will be on the watch continuously, for possible improvements. He is not thinking of the credit he will get, for that, comes automatically, and he will get it, whether or not, the boss wants him to have it. and the real Engineer does not have time, to worry about what the other fellow is thinking, and will soon be in line, for plenty of credit. I told the old fellows, the only difference between them, and the ancient Egyptians, was they used straw, in the making of brick, and you do not know how.

However, it has been my good fortune to be employed by progressive men, who would

listen eagerly, to any suggestion their Engineer made. and the never attended a convention, their Engineer was not taken along, so he could see the latest ideas in machinery, and compare notes, with the other Engineers in attendance.

When I first entered the service of Straight Brothers, I could see many things, that were, sorely in need of improvement. The first thing I tackled, was a kiln conveyer, for loading and, unloading the kilns. It could be wheeled into the kiln door, and the ware placed in it, outside the kiln, carried inside, and elevated to any desired height. It could be reversed, and the burned ware, carried out, in the same manner. None of the ware need be pitched up, or down, and it was not wheeled over the kiln floor, which damaged the floor, very much.. The plan, called for an electric motor, for power, and there was none in the Town, but they liked the idea so well, they told me to make it, and they would order a small generator, which I could install in the engine room; so

This machine, proved to be a great success, and was copied, by many manufacturers.

When the oldest Son, of L.S. came from College, after finishing a course in Mechanical Engineering, the Company bought a plant, located on a shale deposit, near Adel Iowa, and moved me, there, to take charge of the Engineering work. I had known Halver, since he was a little boy, in Fonda, and liked the youngster, very much, but I wondered whether of not, his College education, without the necessary training, would make him difficult.

The plant was badly run down, and there was much to be done. Sure enough, Halver and I, could not see alike, in many things, but I considered the fact, he was fresh, out of College, which has a great deal of theory, in its teachings, and he would soon find, that theories are the raw materials from which, facts may be proven, or disproven, and only prepared him, for the beginning of his education, and not, the finish of it. I knew he lacked nothing in the mathematical procedure of mechanics but, I also knew, he lacked a great deal, in experience, which is a must, before becoming a successful Engineer. The profession of Mechanical Engineering, or any other profession, for that matter, is like learning to drive an automobile. One may learn, all the parts, and know the principals of the design, and know all the road laws, but, he is not a driver, until he gets behind the steering wheel, and herds the thing down the road.

- If the College man, could understand, there are things that can not be learned, from books, alone, he would be much better prepared, when he enters the race for survival, with the other fellow. Education, is a must, put, experience, is also a must.

Halver did not get along with his men, which is very bad, for one who is at head of a concern that employes many people. He acquired the name of trying to run a Sunday School, in which, there is no harm, if practiced in the proper environment, but that place is not in a brick and Tile Plant. there is a saying, there are but two requirements, to qualify for the job, a strong back, and a weak mind. And, I want to say, right here, there were never, more noble men, than the rough class found among them. I know, for I worked among them, for many years. Another mistake he made, was in telling a Merchant, in the Town, the best way to get a lot of work out of the men, was to keep them afraid of the boss. There was never a greater mistake made. Such things, are never kept secret, and that remark, was soon known to every one on the job. There was not a man on the job, that was afraid of Halver, nor any thing else. Their only fear, was for their job, and that, because of the effect it would have, on their Family. The feeling the men have after hearing such things, is one of revenge, and the only way they know, how to get it, is by watching the boss, and killing all the time possible, when he is not there.

Halver, told me later, there were three men at the plant, when he first started, that taught him more about handling his problems, than all his College education, and those three were, my self, Ed Thoms, the Steam Engineer, and Will Smith, the yard foreman. They, would talk back, to him, when they thought he was wrong, or did not like what he said. Our shale bank was a mile from the Plant, and was transported in small cars, that were pulled by, a locomotive, constructed by placing an old time gas engine on a four wheel flat-car, the power being transmitted to the axles, by a link belt, through a friction clutch. There was no housing, of any kind, the operator must stand, or sit, on the thing, in all kinds of weather, be it rain or snow. It was also, very slow.

I designed and built, an electric locomotive, that was entirely inclosed. Using a three phase, alternating Motor, for power. The current being transmitted to it, through two trolleys, and the rails.

it being three phase. It worked very well, and speeded up the transportation of the shale which was needed very much, for we had increased the out-put of the plant, 60 %.

The shale pit, floor was so much lower than the surface of the ground, a long cable was used, to pull the cars out of the pit, where they could be reached, with the locomotive. This cable was attached to the locomotive, which proceeded up the track, until the cable was tightened, so the car could be lowered into the pit, by it. This was too slow, and required one of the men at the pit, to come out each time, to help the locomotive operator. I installed a hoisting drom, at the edge of the pit, and the operator could handle the whole procedure, without help.

I made three kiln conveyers, like the one at Fonda, except, I abandoned the link belt, in favor of a gandy belt, with lugs attached, to carry the ware.

I think, the most important thing I made, was an elevator, to handle the ware from the second floor of the dryer, where the larger tile were placed, for drying. Shale is very brittle, when dried, but not burned, and there was altogether, too much breakage, in the process of lowering them to the ground, on their way to the kilns.

This had been done, with two, balanceing elevators, ~~the loaded one~~, the loaded car on one elevator, bring the empty car up, on the other. This mechanism, was handled by men, using a friction brake, to slow it, when it neared the landing. Carelessness, and bad judgment, caused the cars to be let down, too fast, and when they would strike the lower landing, many of the tile would be broken.

Straight Brothers, had a Plant in Auburn, and Roy Weeks, a young fellow, whom I had trained, while he was taking a Mechanical Engineering course, through correspondance, was their Engineer, there, and he was having the same trouble. He had devised an elevator, the operator rode on, thinking he would be more carefull, if he were on the cage. It proved to be a failure, to a great extent, for the man, would misjudge the distance, just the same. This was the only time, while I was with them, that L.S. could not see the advantage, of the design, from looking at my drawings. So, I made a modle, using a piece of babbitt, for the load, and set it on the bench, in the store room, and waited for him to come to the plant, when he did, come, I took him into the room, and showed it to him. He played with it, for a long time, and when ha came out,

he wanted to know how long it would take, to get it into operation?. and for me to get at it, right away. I think, the main reason for not being convinced before, was his desire, not to hurt Roys feelings, and he thought, if he insinuated Roy's device was not good enough, it would do, just that. I got it ready to install, and had the old elevator torn out, when my helper, dropped a schive wheel on my foot, breaking the arch bone; I pulled off my shoe, and could see the bone sticking up, under the skin, and pulled my shoe back on, so I could get home. When the Doctor came, he said, I had set the bone, perfectly, when I had pulled on, my shoe, and all he had to do, was to put a splint on it, and wrap it up. The next morning, I found a couple of old brooms, and using them for crutches, hobbled over to the shop, and made me a wooden leg. There was a shelf on it, where I could place my knee, and my Wife made a sling, to go over my shoulder, to hold the weight of my leg, and I worked in that thing, untill my foot was well. We had the new elevator instelled, in a short time, and L.S. said, it saved its cost, every day it was in operation.

It was difficult, working with Halver, I could have had muxh trouble. My patients was wearing quite thin. I could have helped him achieve his ambition, much sooner, if he had been a little more co-operative, but he knew it all, and would listen to no advice from any one, any time. I put up with it, untill my two years were up, and left him, to paddle his own canue, for a while.

I excepted a position with the Rockwell City Brick and Tile Company, as Superintendant. While I was in Rockwell City, Straight Brothers had a bad accident, at their Auburn plant, killing one man, instantly, and hurting another, badly. The latter being my good friend, Roy Weeks, of whom I have spoken. Their shale bank, was on the oposite side of the Coon River, from the plant, and the shale, was transported, over the River, by means of an areal cable-way, I had installed, some time before, consisting od two, 100 foot towers, ^{one} on each side of the River, with a cable, extending from the top of one, to the top of the other. There was a skip, operated from this cable, that could be lowered, or dumped, at any desired place. This skip, was controled by an operater, near one of the towers. The two boys, had gotten into the skip, to cross the River, to do some work on the oposite side. When they were 70 feet, in the air, for some unknown reason, the

skip dumped. throwing both of them out. One of them fell to the ground, killing him instantly. Roy was thrown against the tower, and lodged, in the V, of one of the X braces, and hung there, until rescued. But, he had two ribs broken, and was badly bruised.

The cable, running from the cable to the skip, was badly tangled, and the skip, could not be lowered to the ground. I received a call, from each of the three Brothers, who were in three different places, when they had received the news. All of them seemed to have the same idea, which was, to get Clyde, on the job, as soon as possible.

I told each of them, I would be in Auburn, as soon as possible, and caught the first train, to Lowerville, where I changed cars, for Auburn, arriving there, quite late, in the evening, and found Guy, waiting for me, at the depot. We went to the Hotel, where Roy was, but the Doctor had given him so much dope, to kill the pain, he was still sound asleep. Guy gave me the details, as he knew them, but there was nothing we could do, that night, and I told him, he had better go to bed, and get some rest, the job, was now, up to me, and I would probably spend the greater part of the night, figuring ways, and means. I realised, it would be a hard matter for a man to sleep, when one of his trusted, and trusting employees, had just been killed, on the job.

The next morning, we went to the River, which is a mile from the Town, so I could see what would be needed. I climbed up the tower, to a level with the skip, and made a careful study of the situation, and decided on a plan. Then, I returned to the ground, and ask Guy, to take me to Town, where I could get the things I needed, for the job.

We had breakfast, after which, I went to the Hardware store, and obtained a clothes line, and a stout fishing pole, got by bag of tools, from the Hotel, and we returned, to the tower, ready for action.

The skip was hanging, about ten feet from the tower, and about 30 feet from the cable above it. It was necessary for me to get onto the skip, in order to untangle the cables. I had figured two ways of doing it, one was, to go to the top, and go out on the main cable, and from there, down the tangled cables, to the skip. But the cables were so badly worn, they would tear my clothes, to say nothing about my skin, so I abandoned that idea. That is why I had gotten the fishing pole, and the clothes line.

I cut the pole the right length, to reach the skip, from the tower, wound the line around my waist, and climbed the tower, again, and dropped the end of the line to Guy, so he could tie the pole to it, pulled it up, re-wound the line around my waist, got a good position on the tower, and placing the pole against the skip, pushed it as far from me, as possible, and let it swing back. I kept this up, until the skip was swinging, almost to the tower. Picking a good place to grab onto the skip, I dropped the pole, and the next time the skip came to the tower, I grabbed onto it, and swung out, with it.

After getting onto the skip, it was a short job, to get the cables untangled, and I directed the hoist man, to lower the skip, and my self, to the ground.

Guy, and my self, went back to the Office, where, the first thing Guy did, was to call his Brothers, to let them know, every thing was under controle, then, he ask me, what my bill was, I told him what my expense would be, by the time I got back home, and said for him to pay me, what he thought the job was worth. He wrote me a chack, for \$100.00, plus my expense. I thought it was too much, and told him so. But he said, there was not enough room on the chect, to write the amount it would take, to get him to do, what I had just done. He told me, he had been scared stiff, all the time I had been working on the tower, and when I had swung out, with it, he thought he would faint. to the un-initiated, the work of a high man, is much more hazardus, then it seems, to the one who is doing the work. When I had left home, I did not tell the Family, what I was going to do, thinking they would worry, if they thought there would be some danger. I would have better told them, for they had received the Des Moines paper, who had a reporter on the job, and he exagerated, my part in the program, greatly.

Shortly after this, L.S. phoned me, to meet him at the Depot, In Rockwell City, as he wanted to talk with me. I met the train, and we were not through talking, when it pulled out, and he ask me to jump on, and I could catch the return train, at Lowerville,

I finally went clear to Adel, and out to the Plant, and inspected it, from end to end. Before I left, I had agreed to come back, to work for them. It seemed, they wanted, very much, for me to come back, and offered me, most any thing I would ask. I told L.S. just why I had left, and he promiced I would be working under no one, and could plan my own program, at all times. They would make satisfactory arrangements, with Mr. Steinburger

at Rockwell City, for a release from my contract with him, would move me to Adel, furnish me a house, with all utilities paid, for \$100.00 per year, and would give my new Son-in law a job, working with me, and my pay would start, the first of the present Month, which was two thirds gone, at the time.

So, we were back, working with Halver. The plan worked quite well, for a time, but gradually, became the same old story. I was getting sick and tired of it, and told the young man, where he could go. Our association was not very pleasant, after that.

I stayed, however, until my two year contract expired, and excepted a position with the Belplane Brick and Tile Company, at a substantial increase in salary.

On arriving at Belplane, the Manager ask me to except the position of Superintendent, at another salary increase, and hire a Mechanic, to work under my directions.

There is a great deal more responsibility, in the position of Superintendent, if he is also responsible for the mechanical work, which I would be, under those conditions. I hired my Brother, ^{MY BROTHER} who was living in South Dakota, and wished to come back to Iowa. If I had have known as much about the situation, as I later learned, I certainly would have turned that proposition down.

This, was a surface clay deposit, with a shale working factory built on it; There was a shale bed, near enough for shale to be shipped in, to temper the local clay, and had been intended so, by the designing Engineer, but Management would not bother with it. The Promoters knew nothing about the ceramic game, all they knew, was to sell more stock to the unsuspecting Public, by making great promices.

I experienced two of the hardest years of my professional career, in Belplane. I tried, my best, to get the Manager to let me ship in shale, but no.

They maintained an Office in the City, while the plant was two miles out. when they roped in, a sucker, they would telephone me, to start the plant, and when they arived, we would be making fine looking tile, and trucking them into the dryer, and as soon as the prospect had gone, we would bring them out, again, and pile them into the pugmill bin, ready for the next sucker. We, positively could not dry the material, in the dryer that had been constructed, and what little we could nurse through, the burner could burn it properly. He was a shale burner, and knew nothing about burning by sight.

There being no settlement, with the surface clay, in the kiln, he was lost. Some of it would be burned to a clinker, while some, would not be burned enough.

After I had gotten the dryer changed, we did better, in the drying, but I was compelled to let the old burner go, and hire a man who was a surface clay, burner, and one that would listen to my advice. About this time, the Manager, got into some kind of trouble, in the Town, and left, between two days, and the management of the whole plant, fell on my shoulders. That is when I learned of some of the crooked work, that was going on, but not all of it, as I learned later. The President of The Company, lived in Waterloo, Iowa. His name, was Harry Law. Harvy, came to the plant, and proposed, that I become the Official Manager. I excepted the offer, thinking I would be able to ship in shale, which would allow me, to make a perfect ware, but, soon after, Harvy came again, to tell me, that under no conditions, must the plant make, more than expenses, for the next year.

Knowing the financial condition of the Company, that gave me, something to think about.

The Promoters had sold, two hundred thousand Dollars worth of stock, to farmers, Business and Professional men, taking 40%, for their commission paying the active, salesmen, only 10%. so, they had annexed sixty thousand Dollars, for their own bank account. Then, not being satisfied, they had borrowed sixty thousand Dollars, and had issued a sixty thousand Dollar, first mortgage bond, and (something, I was not supposed to know, but did) the Laws, had bought the bond issue. It was plain to be seen, the bonds had cost them nothing, and if the plant was sold, to satisfy the indebtedness, and they saw fit to, they could own the entire concern, for nothing, flat.

I would not be a party to this swindle, and told Mr. Law, to get himself, another Manager. In a couple of weeks, he came back, to tell me, he had hired a manager, who would be on the job, the first of the next Month, and after finding, who the new Manager was to be, I told Mr. Law, I was handing him, my resignation, now, to take effect, the new Manager took charge.

I knew the man, and his reputation. He had wrecked two plants, that I knew of, and would double-cross his best friend, for a lousy Dollar. I would have nothing to do with him.

My contract with the Company, called for me to leave a certain amount of my salary, each Month, for purchas of stock, which would be paid back, at face value, should I be discharged, or resign, any time.

When the new man came, and was duly installed, I demanded my salary, and all the money I had paid for stock. The new Manager issued me a check, for the whole amount, without a murmer. This check, was for quite a large amount, and I expected an argument, about paying it, all at once, for I knew thare was not enough Money in the bank, to meet it.

I also knew, the new Manager was as anxious to get rid of me, as I was to leave, for I knew, that he knew, that I knew too much about his past.

Knowing the Iowa banking law, and also, knowing the Cashier at the bank was the Treasurer of the Company, and very closs to the Laws. I decided to use the utmost precausion. I walked into the bank, but did not present the check, for payment, and they played into my hand, nicely. The Teller told me, Mr. Ermins wanted to see me, and I went into his private Office. He informed me, the Company did not have enough Money, on deposit, to meet that check. I ask him, what check he was talking about, and he said he knew I had a large check, that had been given me, by the Manager. O, I said, that check ?. Well, Mr. Ermins, I did not present it for payment, and I will not do so. I knew there was not enough to meet it, so I decided to do a little scheming, on my own hook. When the check is, presented, you had better pay in, or your bran-new Manager is going to jail, and I might add, it would not be the first time. I know him, and he knows me. In fact, the first time we met, was in a Court of Law, concerning some machi- nery, I was called on, to identify, proving he had stolen it.

The Iowa check law, provides; If A, issues a check, to B, and B, presents said check, at the bank of issue, and payment on said check is refused, for any reason, said B, has no recourse, at law, and said check is of no value except, as a promisory note but. Should said B, sell said check, to an innocent person, and said innocent person, presents said check, at the bank of issue, and payment id refused, for reason of no account or, insufficient funds, said innocent person may deliver said check, toget- her with a statement of facts, to the Sheriff of the County, in which said check, was issued, and it becomes the duty of said Sheriff, to place said A, under arrest, and

keep him in custody, until the Court, shall hear the case, and make a decision.

As you can see, Mr. Ermins played into my hand nicely. He tried to bluff me, saying, he would notify every one in Town, that had enough money to buy that large a check, before I could get to them. Do not worry about that, Mr. Ermins, suppos I have sold it to my Brother, just across the Street?. He said, your Brother hasent enough Money to buy that check, and you know it. Mr. Ermins, I said, you seem to forget, that check was issued to me, and I can do exactly as I please, with it, If I want to sell it, for twenty five cents, it is none of your business, but, the man who bought it, will demand, face value, and you had better pay it. Good day Mr. Ermins. And I started for the front door. But, Mr. Ermins, came to the front, from behind the cages, and stopped me, at the door.

He said, he had decided to advance enough Money to the Company, to meet the check, and if I would indorse it. Mr. Ermins, I said. the way you and your new Manager has tried to bull-doze me, I would not trust you, to even look at it, if I had it. If you care to count, the proper amount of Money, into my hand. I will see if I have the check. He ask me to come into the Office, again, and he would pay me, and he did.

If the check had have been paid, without so much fuss, I probably would have let the matter drop, but after they tried to eucure me out of the Money, that was justly mine, thereby proving I had been dealing with a bunch of crooks, it appeared to me, I should tell some one, in athority, how maters stood.

Dr. Williams, was a good friend of mine, and a large stockholder, in the Comapny. I did not want to see him, nor, his friends, get swindled out of their Money, without a chance, so I went to his Office, the next morning, and gave him the whole story, as I had found it. The reason I had quit the plant, the past history of their new Manager, and his general charictor, and what I had found out, about the bond deal.

He ask me to say nothing about it, so he could keep, what he had decided to do, from reaching the ears of the Laws, and the bank, until the bonds were put up for sale.

Sure enough, one year from that time, the plant was put up, for Sheriff sale, to satisfy, the bonded indebtedness, and went, clear to the auction block, but the Ductor had taken the other stock holders into his confidence, and they had raised the Money,

to pay it off. The Laws, got their 60 thousand Dollars back, but were completely out of what they had, in the plant.

The new Company, wanted me to teke charge of the plant, but I was under contract with another Company, for four more years. I told them about shipping in, shale, and they they were soon, making a very good product, and were seeling all they could make.

When I quit the Belplane plant, I decided I was entitled to a vacation, and planned on taking a trip, but Mr. Votau, who was sales manager for the Fate-Root-Heath Company, wrote me, saying, he understood I had severed my connections with the Belplane people, and was thinking of taking a vacation, and wanted to know, if I would like to make it a ^{paid} vacation ?. They wanted me to go to Minnesota, and call on a Gentleman who had informed them, he had found a very valuable, shale deposit, on his farm. I went, to see it, He had a very good quality of shale, but there was a large deposit of the same grade, along the rail road track, right in the Town, and a very desirable place tfor a factory site, while the other fellow would have to transport his, shale, across a lake.

I reported it, as I found it, and never heard any thing further, about it.

On my way back from Minnesota, I stopped in Adel, to see some of my old friends, and on my way, out to the plant, I met Halver. He was going to Town, on his bucycle, and I wondered if he was going to forbid me going to the plant. He had told me, when I had left, never to set foot on his prperty again. When I met him, he jumped off his bike, and came toward me, with out-streched hand, and the first thing ha said was, boy, am I glad to see you. Knowing Halver, I knew, there was something in the wind.

He went back to the plant, with me, and showed me all over the place. When we wound up, at the Office, he broke the news.

He told me, ha had designed a shale shaver, and they had been talking about me, wondering if they could get me to come back, and take over the job of directing its construction?.

I ask him, what they were going to do with Gary Burges, who had taken my place, when I had left. He said he had talked it over with him, and that he (Gary) was very much pleased at the prospect of my coming back. But, I wanted to talk to Gary, and did so. Gary told me, he knew he could not build the machine, and any way, the machine would

not be built, unless Halver could get me to come back. L.S. had informed Halver of that fact. So, that was why Halver was so glad to see me?.

Halver had designed a manmouth machine, to work in the shale pit, called a shale shaver. This machine would stand, sixty feet high, and would weigh, in the neighborhood of thirty tons. It would have a three point bearing, on the ground. Two rollers, and a pivot. The rollers would travel on a circular track, and the pivot would guide their course, and hold the machine against the shale bank. He promised, not to interfere with my work, and offered me, quite good pay. So, once more, I was back in Adel. But this time, with a definite purpose, in view, and wondered how long it would last, after that purpose had been accomplished?.

This machine, was a large undertaking, and when I had studied the plans, I ventured to suggest some changes. He said, it might throw the whole thing out of balance, and it could do, just that, if it were carried too far. So I decided to follow his plans, to the letter, but determined, to call his attention to the things I did not approve of, and do so, in writing, keeping a carbon copy, of each objection, in case it should become necessary, to show it.

The first thing I called his attention to, was the track, rollers. They were four feet long, and one foot, in diameter, and were to be made, in two pieces, with a four inch shaft, through them. They were to travel on a single rail, and would bear on the rail, at all points, at different times. My contention was, the shaft would spring, enough, to force the rollers apart. But, he was sure the large shaft could not spring enough for that. (Number one) These rollers were to be driven by an electric motor, and were to be geared down, to a very slow speed, before reaching the rollers. they were to be reversed, by reversing the motor.

The pivot, was equipped with an advancing screw, to keep the cutting mechanism, against the bank, and advance it, periodically.

The cutting mechanism, was to be a detachable, link belt, with knives, and buckets, attached to it, alternately. The knives were to be attached to the chain, with a long bar, extending, from either side, to a guiding groove, and a roller, fitted on it, that was to run in a groove, extending from the top, to the bottom of the machine.

There were bound to be small pieces of shale, falling all over the schoot, and they could catch, between these rollers, and the guides, they traveled in, causing the bar, to be held back, at one end, which would throw the chain in a twist, and would have a tendency to break it.

I called his attention to this fact, but he could see nothing to my fears. (item 2)

The buckets, were to carry the shale to the top of the machine, and dump it into a long schoot, leading to a storage bin, located over the pivot. This bin, had car tracks under it, for the clay car to come in over, for the purpose of getting the shale that had accumulated in the bin. These tracks, were in line with the track, leading into the pit, only at one point, as the storage bin, moved, with the shaver, it must be in one exact position, to line the two pair of tracks, so the clay car could come in, and must stay in that position, until the car was loaded, and pulled out. I called his attention to this, and for a wonder, he could see the mistake, and ask for a suggestion. I proposed putting the bin, on a trailer that would follow the shaver, as it advanced, and it was built that way.

The first trouble we had with the machine, was the track rollers. my prophesy, about the two pieces spreading, came true, at once. But, Halver had a remedy for it, so he said. The rollers being just the right size, we could shrink a twelve inch pipe over them, and our troubles, in that line, would be over. I had doubts about them holding, but I was willing to give it a try. We did that, and when the pressure came on them, the pipe peeled off, like it was card-board. After this long time, he ordered rollers, cast in one piece, and to have them cast from Manganese steel. I thought that was going a little too far, but they would surly hold.

When we got the machine into the shale bank, and it started cutting, the chain broke, and piled up, in a heap, at the bottom of the schoot. It was a days work, to get it back on the sprockets, and it had not operated five minutes, when it broke again. and kept breaking. The reason was obvious. One of the rollers caught in the guide, and bent it, to such a position, it could not get loose. This trouble went on, for a couple weeks, and Halver, would not give up. Finally, L.S. came down, and ordered the machine stopped. He was so mad, he suggested, we throw tha damn thing in the River.

I really, felt sorry for Halver, he had put in, an awful lot of work on the project, but, if he had taken a little advice, he would, at least, had some one to bear part of the blame. His theory was not at fault, but, once again, there was the proof, that one must have experience, to finish ones education.

It was quite a blow, to Halver, but I was sure we had not heard the last of the shaver. But I was very much surprised, when L.S. came up, with a bright idea.

In my opinion, it would be subject to more trouble, than the one we had just built. His idea, was to install two, upright shafts, with knives attached to them, that were to do the cutting, by revolving, in opposite directions. These, would tend to pull the machine, to one side, especially, if one was cutting, deeper than the other. And, as they would be cutting on the inside of the circle, the farther the machine was pulled to one side, the deeper they would cut. It was an impossible proposition and I tried to talk him out of it, and he tried, just as hard, to convince me it would work. He knew very well, I would not sanction it, unless I was ready to go the whole way, and I would not do so. He started me, making patterns for the castings that would be needed, and I worked on them, for almost a week. Halver, was just as sure as I, it would not work, but that little devil, was quite happy, thinking, his Father was going to produce another failure. I believe, he was after revenge.

One day, after Lea had reached home, he phoned me, to stop work on the patterns, until he arrived, the next day. When he came into the shop, I greeted him with, have you gotten cold feet?, He allowed, I had frozen them, with my lack of seeing things, his way, I want your sanction, he said, before we go any farther. But I told him I could never do that, for I was sure it would be a failure, and I can see no satisfaction in being able to tell you, I told you so. As a rule, Lea was not very demonstrative, but he came to me, layed his hand on my shoulder and said. Clyde, I believe you can make a machine out of the wreck, that will work, and I want you to do it. Order what you need, and it will be forthcoming. I tried to tell him, what I proposed to do, but he stopped me, saying, he did not want to hear any thing about it, until I was ready for a demonstration. I knew, if I excepted the challenge, I had better make good, but I was so sure I could do it, I told him I would tackle it. This had come to me, as a complete surprise.

I had no idea, it would be put up to me. I told L.S. I could use all of the frame, of the old machine, but most of the machinery, above the base, would have to be scrapped. Nevertheless, I want it understood, I have learned a lot, from Halvers mistakes, most which, I foresaw, and warned him, as I can show, by the carbon coppies of the changes I proposed. I want to give Halver credit, for a lot of good ideas, and after the machine is made a success (if it ever is), it will still be Halvers Machine.

The confidence placed in me, was touching, and to Halver, it was a slap in the face.

I stripped the machine, of every thing, above the base, except the frame, and put a double sprocket, above and below, using two chains, instead of one. The knives and buckets, were fastened, between the chains, with spacial castings. One chain could not get ahead of the other because, the two sprockets were keyed to same shaft, above and below, and if one turned, the other must. The machine was nearly the same, as it would have been, had Halver listened to my suggestions, when we were building it.

Halver should have had some of the credit, but as far as his Father was concerned, he would get no credit, at all.

We started the machine, with my self, at the controles, with an understudy, standing by. It was a continues operation, except, when the bin was full, and we had to wait for the clay car, to empty it. The operater of the clay car, never saw the machine in operation, except, while cutting the first load. I would not start it, until he had reached the pot of the grade, for the tork of starting the big machine, would lower the voltage, until he would have trouble, getting to the top of the grade.

After the machine had been in operation for some time, and had proven its self. L.S. told me, one day, to be at the depot, the next day, prepared to go to Okoboja, for a two weeks rest. I thanked him for the invitation, but the work at the plant, had gotten so far behind, while I had been busy with the shaver, I did not see, how I could get away, just now. In about an hour, he came back to inform me, that now, that I was through with the shaver, I was, again under orders. I acknowleged the fact, wondering what he was driving at. I soon found out, You go home, and pack, what you will need, for a two weeks stay, and be at the depot, this evening, when the Spiret Lake train arives. There will be a ticket waiting, that will carry you to Spiret Lake station.

I am driving home, this morning, by way of Storm Lake, but I will meet you, when you arrive, at Okoboja station, this evening. He was very merry, about the whole thing.

When the train arrived at the Lake, Lea was there, and said I could stay at his cottage, or at the Lake front, Hotel. I begged his pardon, but told him, as I was there for a rest, I would prefer to stay at the Hotel.

He had a speed boat, and ask me to come to his cottage, by steamer, the next morning, and get it, and the boat was mine, as long as I was at the lake. All he ask, was for me to leave it at his boat-house, if and when I was through with it, at night, and to replenish the gas, at the filling station, at the draw bridge.

I got the boat, and had a wonderful time, with it. I used so much gas, I was ashamed of myself, and thought I would fill up, at another station. When the fellow had it filled, I ask him, how much, he said, Mr. Straight had told him, in case I came there for gas, to charge it to him. The old fellow, knew me quite well.

When I had been there for a week, Halver called me by phone, saying, the electric power plant had broken down, and he would like for me to come home, and install gasoline motors on the kiln conveyers. I told him I would be there, thinking the situation was serious. That afternoon, Lea called me, and said he would pick me up, in time to catch the train. He picked me up, alright, but headed for the open country. I told him, he had better get to the depot, or I would miss the train. He just laughed at me, saying, it would be, just too bad, if I missed that train.

There will be no gasoline motors installed on the conveyers. He had called the power plant, and found, the current would be on, before I could get there, and that I was going to stay, the two weeks, if the plant had to close down.

It seems that Halver, was looking for an excuse, to get me back to the plant, and Lea, was just as determined, I would stay, the two weeks, and finish my vacation.

Shortly after I had returned to the plant, Halver, bought an electric truck, to carry the burned ware from the kilns to the loading track, or to the piles. It had an elevating platform, and was powered by storage batteries, that must be charged, all night, and boosted, during the noon hour. He had a mercury-arc charger installed, that did the job real well, unless the current was interrupted, in which case, it would loose its arc, and must be rocked, to start it again. This, necessitated the presents of a

man with it at all times, and that man, having nothing else to do, would go to sleep, and we would often find an under charged battery, in the morning.

Halver ask me to install a motor-generator set, which was worse than than the arc, for if the current went off, the generator would reverse its self, becoming a motor, and we would find the battery, completely discharged, in the morning;

The General Elctric, sales man called on us, each Month, and the first time he called, I ask him if their Engineers could not find a way to controle these charging outfits?. He said they had been working on it, for some time, but had came up with nothing yet.

I had an old Outler Hammer clutch magnet, and I also had an idea. I placed the charging outfit on a shelf, installed a knife switch, so the magnet would throw it into contact, when the current was on, and hung a weight at the oposite side of it, that would pull the switch, out of contact, when the power left the magnet, thereby, breaking the connection, between the charging motor, and the batteries. When the current came back on, the magnet, would be activated, and overcome the weight, and the charging line, was connected again. One of the feed wires, was passed through the magnet coils, which would activete the magnet.

It was a simple, but crude, arangement, but it did the work, perfectly.

The next time the General Electric men, came, I told him I did not think much of their Engineers genius, and showed him, the device I had installed. He said his Company would not be interested in a thing like that, and walked away.

A short time later, I thought of something I had forgotten to order, and went to the Office, to see if he were still there. He had not gone, for his bags were there, and I had a hunch, I knew where I would find him. I went to the charging room, and, sure enough, there he was. He had a note book and pencil, and was meking a sketch of my charging outfit.

I thought your people would not be interested in that junk, I said. Ane if you changed your mind, the least you could have done, would have been to ask my permission, to make a sketch of it, which I would have given, and I would thing a lot more of you, had you did that. He said he tried to find me, but could not. Which made it worse, for I had been in the shop, all the time, and what he said, was an uncalled for, lie.

When their next bulletin came out, there it was. Their new circuitbreaker, designed to protect, motor-generator batterie charging outfits. Patent applied for.

My experience has shown me, many of the devices these large Companies are manufacturing, under letters patent, were discovered through their agents in the field. There is an old saying, that necessity, is the mother of invention, and my protecting device was an example.

There was a great demand for hollow tile silos, and the regular, streight block, did not make a smooth wall, when that wall was circular. Being circular, the corners would stick out, all over the face. There were meny devices for bending the blocks, after they had been formed, but there was a tendency for them to streighten, again, during the drying and burning processes.

I experomented with dies, and found, the blocks could be formed, with the curve made at the die, and they would stay that way, until finished. But, there must be a machine, to cut them the right length, and at the proper agnle.

I finally completed a cutting table, that would the trick, and do it, automatically, by using a power drive, through a friction clutch, to help the friction of the stream of clay, on the cutting table, measure the proper length.

I built one, and put it to work, at the Adel plant. This, was the enitial cause of more trouble with Halver.

If no one else, had such a machine, no one could compete with him, for a perfect silo block, that could be used for building a silo, with a perfectly smooth wall, inside and out. The Carlisle Brick and Tile Company, wanted one of the machines, and ask me to make them one, before I had made the Adel machine, and I had told them, the cost, would be in the neighborhood of \$500.00, which, they had said, they would be willing to pay.

But, after I had put the Adel machine to work, Halver said I should charge the Carlile people, at least \$600.00. I had entended to have their machine made, at the Eagle Iron Works, and give Halver, half the profit, but when he said, to not sell it for less than \$600.00, I did not know whether or not, they would pay thay much, and decided to go to Carlisle and see them. Just before I sterted, Halver told me, I had better raise that price, to \$700.00. This, was too plein a case of, if you want one of these machines, you

must pay my price, and I intend to make that price so high, you will refuse to pay it.

I told Halver, there was \$300.00 profit in it, at the price I first quoted them, and I would not raise the price again, just to keep them from having one. The Carlisle people are honest folk, and are willing to pay a fair profit, but would know, any thing more, would be extortion.

I sold them a machine, and built it in Halvers shop, giving him half the profit. I did not ask them to pay \$700.00 for it, nor \$600.00, but the \$500.00 I had quoted them originally, and I was very glad I took that course, later.

The Manufacturers Equipment Company, of Dayton Ohio, heard of the machine, and wrote me, asking if I would sell the rights, or allow them, to manufacture it, on a royalty?. I turned the letter over to Halver, as I considered him, as a partner. After waiting, for a long time, I ask him if he had heard from them, and he said he had, but they were no longer interested. I was a little skeptical, about that answer, for they had seemed quite interested. So I wrote them again, and did not receive a letter from them, but a telegram, stating, they were very much interested, and would like to meet me, and for me to let them know, when and where. I wired them, that I would meet them at the Elliot Hotel, in Des Moines, at any date they cared to set. And received an answer, making the date, five days after the date of this wire.

I met them, and drove to Carlisle, where the good people, were not making silo tile, at the time, but, obligingly, changed dies, and set the table in place, and started it, so the visitors could see it in operation. We went from there, to Adel, but Halver, flatly refused to give them a demonstration, so we went back to Des Moines, and to my Lawyers, and had a contract drawn up, giving them the right to manufacture the machine, on a royalty basis, in which I agreed to Dayton, on a salary of \$250.00 per month, plus all expenses, to assist them in getting it into production. I was to go, as soon as my contract with Halver, expired.

When the shaver had been made a success, they had it patented, and gave me a quarter interest. Which meant nothing at all. For there were none to be sold, and when I had perfected the cutting table, I told Halver I would give him half interest, if he cared to pay for the patent expense, He agreed to it, and told me to make the patent Office

drawings, and file them, and he would pay for them. I made the drawings, and filed them, together with the briefs, and paid for it. When the Patent was allowed, there was no Money fourthcomming from Halver, so I, also paid for that.

After the Equipment people had left, and I had returned to the plant, Halver came out to the shop, with some contracts he had drawn up, and ask me to sign them. He said he thought we should have our understanding, in writing, and assured me, they were no more than we had agreed on.

He had not consulted me, in any way, and had mervt to think I would sign them, without taking the time to read them, but he certainly was mistaken there. After he had lied to me about the Equipment people ect. I would not trust him, that far.

The farther I read, the madder I became. Among other things, there was a paragraph, stating that we, not neither of us, could sell, or offer for sale, this machine, without the writen concent, of the other.

In the case of the shaver, I had no contract at all, just Halvers word, and I had came to the point, where I placed little confidence in that, unless it was to his advantage. He had lied to me about the Equipment people, had failed to keep his word, concerning the payment for the patents, and many other things. So I made up my mind, then and there, to settle the whole business. I signed the shaver contract, and handed them both, back to him, saying, Halver, here is where we disolve partnership, once and for all. He folded them up, very carefully, and walked out, as though he was very well pleased with himself. I was greatly surprised, for I had thought, he would, at least. put up a fight. I told him nothing about my agreement with the Equipment Co, and did not intend to, untill I was free from the contract with him.

When my contract did, expire, I told Halver I was through, and was going to Dayton, to get the cutting table into production. He gave me a broad grin, and said. You can not manufacture that table, for you can not sell it, without my concent, and I will not give it, under any condition. Halver, I said, If I can not sell that table, I would like to know why?. He said, because you signed an agreement, stating, neither of us could, do you not remember?. Halver, you had better get those contracts out, again, and look them over. I am afraid, you misjudged my wisdom, when you thought I would sign my right away

He went to the safe and got them, and after looking them over, he said. Well Clyde, this is one time, I am compelled to acknowledge, you put one over me.

No, Halver, I said, this is one time, you must admit, I kept you from pulling a fast one on me, I met his Cousin, in Des Moines, a few days after that, and he said, he wanted to shake the hand, of the man, who beat his Cousin, to the draw.

That was the last of my association with Mr. Halver Straight, in a business way, but, he never came within 2 or 3 hundred miles of where I was located, after that, that he did not come to visit me. And I must say, after all the trouble we had, I liked the fellow. He was a worthy adversary, and I remember his good points, much more vividly, than his bad. He has gone to the great beyond, now, and I am sorry.

Five years ago, I visited the old Town of Fonda, and upon making inquiries, discovered, Mr. and Mrs. Guy Straight, still were living there, and called on them.

He, and his good Wife were at home, and we had a wonderful visit, about the first thing about old times, that Guy brought up, was the case of the tangled cables, at Auburn. When we parted, both of us, had tears in our eyes, Remember what I said, in the beginning of this story. Most of my employers, seemed more like associates, than bosses. They were quite old, but they were in the best of health. I have not heard, from them since, I would have stayed longer, but I was not alone, and could not keep my partner waiting for me.

Getting back to our story. We finally got started on the table, being delayed very much, because of priorities, this being at the time, world war one, was in full swing.

After it was in production, I went on the road, selling it, and other articles, the Company manufactured. It has been said, it is easier to sell to people, with whom one is acquainted, but in my case, this was not true. I was well known, alright, and when I handed my card to the Lady at the outer desk, I would, immediately receive an invitation to visit the Lyons den. Not because of what I had, to sell, but because they wanted information. There always, was something wrong at the plant, and they had been waiting, ever since they received my card, stating I was on my way, for they knew, how much I had done for the industry, and was sure I could help them out. They were not interested in what I had, to sell, but in my ability to shoot trouble

The Company wanted me to make a list of all the Brick and Tile Factories in my territory, and I thought I could get a more complete list, at Ames College, and went there, for that purpose. I met my old Friend, Professor Cox, and we had a pleasant visit, and he gave me, free run of their library, and to my surprise, I had a more complete list, than they; I gave the Professor the advantage of my greater list, for which, he was very thankfull.

This was during the great flu epidemic, and it was very difficult to get accommodations; Many of the Hotels in the smaller Towns, were closed, and the rooming houses did not like to take in, strangers. One night, in southern Minnesota, I slept in the waiting room of the depot. I did not like the job, anyway, so I resigned, and went back to my old love, Engineering.

For the past several years, I had been afflicted with stomach trouble, and had gone through several clinics, trying to find, what was causing the trouble., but got no relief. One Doctor said I had poison in my blood stream, and finally decided it was coming from my teeth, and ordered all of them extracted. I had that done, the next day, having 22 pulled, at one setting. My gums were so badly diseased, I had to wait a whole year, before I could have plates fitted. My stomach, was much worse.

I entered into a contract, with Mr. F.M. Hubble, who was the owner of the North Des Moines Clay works, to convert his clay shingle plant, into a Brick and Tile plant. It was more work, removing the shingle machinery, than it would have been, to build a new plant, for we had to tear it down, and then, build it again. After completing the plant, and building a shale shaver (this was not a copy of the Adel shaver) he retained me, for some time, as plant Superintendent. I was with the Des Moines Clay Works, for three years, and while there, I developed a new texture, for face brick, wanted by the Architects who were planing several new school houses, in Des Moines, and the agents could not find, the desired texture, short of Ohio.

After doing a great deal of experimenting, I came up, with an entirely new face. I called it, the saw-tex, because I produced it, by placing a power hack saw blade, on the stream of clay, as it came from the die, in such a maner, it would turn a small furrow, at every tooth, and when rolled down, with a cotton covered roller roller, it

it made a very fine texture, on the face of the brick.

The Company sold, through a sales agency. The Twin City Brick Company. This agency was not pleased with the new texture, and refused to show it to the Architects. I was sure it was what the Architects wanted, and finally persuaded one of their salesman, to take a sample to the City Office., where the Architects could see it. He took them to the Office, but did not take the trouble to set up a sample wall, just threw them in a corner, and forgot them. I have always thought, the Agency was getting a more fancy profit from the Ohio people.

Mr. Proudfoot, of Proudfoot, Bard and Rawson (the Architects) came into the Office, and while waiting for some one, was looking around, and spied these brick. He ask the Clerk, where they came from, and was told, it was an experoment, I had made. He wanted to know, if they could be produced, and when told, they could be, he said, you may take my order for, for five hundred thousand, right now. Mr. Sauder, the plant Manager, had told me, no one could persuade him to make those brick, but Mr. Hubble. When he got so sick of hearing me sing their praises. and when he gave the ~~order~~ the Proudfoot order, I could not help but, ask him, if Mr. Hubble told him to do it.

The plant could make 20 thousand per day, so it was quite an order. Only, they were not, the Same--tex, any more; They were, now, the Twin-tex.

One day, we were at the County Court house, helping an employee get his natural-ization papers. We were talking with the Sheriff, and the subject of the new schools, came up, and the Sheriff wanted to know, where they got the brick, they were using, and Mr. Sauder said, they were baing made, at his plant, but were orignated, by the Twin-City Brick Company, Emagine that, and right before me. I ask him, point blank, why he thought it was necessary to lie about it, when the Twin City Company had to be compelled to show that brick, and then, had stolen the name?. I am at a loss to know why you will deliberately, sit there and tell the man, a bare faced lie. It took him by surprise, and he nearly blew up. but I was telling the truth, and he had no argument. Finally acknowleging, I was right. Then, the Sheriff, jumped all over him. I wonder why some people are that way,?

There were a great many school buildings in Des Moines, built from these brick, and their design, was worth a great deal to the Company. And that, is what the Engineer is for.

After completing the North Des Moines Clay Works, and getting it into successful operation, Mr. W.J. Goodwin phoned me. and ask me to come to his Office. I went there the next day, and he told me, he had heard, I was through with the North Des Moines people, and wanted to know if I had any plans, for the amediate future.

Mr. Goodwin, was the chief owner., of the South Des Moines Tile and Brick Company, and the Redfield Brick and Tile Company. The Redfield plant, was 30 miles north of Des Moines. He wanted me to go to Redfield with him, and look over the plant.

It was a very old plant, practicaly obsolete, except for the press room, the dryer, and the kilns, which had been re-build a couple of years before. The rest of the plant was in a deplorable condition. He wanted to know, how far I could go toward making a modern plant of it, with 30 thousand Dollars. I ask him, if my salary would come out of the \$30 thousand, and he said no. He would expect me to put in, a part of my time, at the South Des Moines plant, and they would pay, half of my salary, the rest, would be taken care of, by the Redfield plant.

I told him I could make a vast differance, and could make it pay a larger dividend, if I might presume, to have my own way, to an extent. He said I would have my own way, completely, for that is what he was hireing me for. If he had not thought, I knew my business, he would not have contact me. He said, he did not know what the plant needed, and did not wish to be bothered with the details. I had learned, long ago, it was better to know in advance, just what is expected, and if there is going to be any competition, from any source, before committing ones self, to any task.

We closed the deal, on the way home, and I ask him, when he wanted me to start, and he said I had already started, your salary, started this morning. You are now, on the pay role of the Goodwin Industries. He emphasized,, I was on my own, and he did not wish to be bothered. Order what you need, and charge it to the Red Field Brick and tile Company, or the Goodwin Tile and Brick Company, which ever it is for, and we will pay the bills. And for me to come up to the Office, and he would give me a letter of credit.

I spent the next two Months,over the drafting board,making an ocasional trip to Redfield to get measurements,or varufy old ones.

When I had ny drawings done,and blueprinted,I took them to the Office, to show them to Mr. Goodwin. I spread them on his desk,and started to explain their functions,but he stopped me,saying they were pretty. I ask him if that was all he could see, and he said,that is all I care to see. He modified that remark,by saying, I know,you Engineers must put your plans on paper,before you can do any work,and when the planing is done, and the actual work starts, you have nothing to do,but follow the plans,and that is, as it shoupd be. If that is what you want, go ahead with it, and the best of luck.

They had an Eagle Iron Works shaver, and the improvements I made,were.

An all steel clay storage shed,with car tracks,leading from the shale pit, entering it,just under the roof. Two clay feeders, one for each dry-pan, the speed of these feeders,was adjustable,so they would feed the proper amount of shale,according to its condition. An all steel elevator,that would discharge into either of the bins,under which the feeders were located. A button conveyer,under the shale storage floor,which dumped the shale into the elevator,mentioned above. An electric clay car,with double trucks,so it would negotiate the sharp curves, and powered with a motor of sufficient power,to climb the steep grade,entering the storage house. The bottom of this car,was an inverted V, with a door on each side, hinged from the top.These doors could be opened by the operater stepping on a tredle,inside the cab,and closed, automatically.

It was powered with a three phase, induction motor, driving from both ends,through shafts,equipped with flexable couplings, to a shaft on each truck, the latter, driving an upright shaft,through a bevel gear,to another bevel gear,to a cross-shaft, with diamond chains, from there, to the axles. The upright shaft,passed through the center pin. The current,was transmitted,through two trolleys and the rails.

A loading bin,at the shaver,with a belt conveyer,to carry the shale from the shaver, to it. The bottom of this bin, had a two foot,square,gate,that was opened,by the car backing under it,and closed,as the car pulled out. The most of my work,had been done in the shale handeling and grinding department. As I have said,the rest of the plant,

was in fairly good condition, including one of my silo cutting tables.

There was some work to be done, in other parts of the plant, such as transfer tables, at the kilns, an electric car pusher, in the drying tunnels, ect.

It had become a habit, for most of the tile manufacturing plants, to neglect their clay handling facilities, to the detriment of, all of the balance of the plant.

I took my drawings for the clay car, and the conveyor, at the shaver, to the Eagle Iron Works, for them to construct. Had the steel, for the shale storage, fabricated, at the Pittsburg-Des Moines Company, who, also fabricated the elevator parts. The feeders were made by the Globe Machinery Company, and the balance of the materials were ordered direct, from Chicago.

At this time, I drove to Redfield, nearly every day, to supervise the construction of the clay storage building, and the installation of machinery.

Most of the work had been done, during the winter, and in the Month of March, I had everything on the ground, and most of it, installed. Every thing, so far, worked as planned, and I had only used 26 thousand, of the 30 thousand Dollars, allotted.

There was one incident, I must mention. When I had gotten the clay car, on the track, ready for testing, there was no steam in the boilers, consequently, no electric power. The Engineer, said he would have steam, the next day, so I could have current, to make the test. I called Mr. Goodwin, that evening, to tell him, I was going to test the car, some time, the next day, and he ask me to pick him up, when I was ready to go, and he would ride up there with me. I stopped at his residence, the next morning, and picked him up. It was a bitter cold morning., but old Tohm, had steam up, by noon, the sun came out making it a nice day, but it was quite cold, and Mr. Goodwin had been sitting on a pile of ties, near the track, watching proceedings, all wrapped up, trying to keep warm.

I got into the cab, and applied the power, running into the storage house, and back, when one of the bearings, on the forward truck, set. I had to jack the car up, run the truck out, where I could get to it. I went to a garage and borrowed a shaft puller, pulled the shaft out, and scrapped it to a fit, put all of it, back together, and went to dinner. Mr. Goodwin was sitting at one of the tables, when I entered, and I ask him, what he thought of the car. His answer, got my goat, he said, i guess it is half good,

and got up, and walked out.

For the life of me, I could not see, why he should give me, that kind of an answer.

I ate my dinner, and went back to the plant, and gave the car, a thorough testing. It responded to every trial, with plenty, to spare. I was very much pleased with its performance. I tried, opening and closing the gate, under the shaver bin, and the double trolley, switches, I had designed. I noticed that Mr. Goodwin was watching, from secluded places, but paid no attention to him. When I was ready to go home, the Office force, told me, he had gone home, by train.

The next morning, I went to Redfield again. The boys were cleaning up the pit, after a winters freeze, getting ready to start the shaver. In fact, they were getting ready to start the whole plant. I used the car, most of the fore-noon. Mr. Queal, the local Manager, put one of his men, in the cab, with me, so he could learn to handle the car.

We hauled trash from the pit, and dumped it along side of the grade, and just before dinner, they started the shaver, and we hauled shale, and dumped it in the storage house.

When I went to dinner. Mr. Goodwin was sitting at his regular table, but instead of sitting at his table, as I usually did, I went to another table. After I was settled, he called the waitres, and had her, move his dinner, to my table. When he had sat down, he said, Clyde, I want to apologise, for the remark I made yesterday. There is nothing wrong with the clay car, nor any thing else, you have installed, as far as I can see. I ask him, why the sudden change, and he told me of some talk, that had been brought to him, while I had been building the clay car, concerning its design.

The Engineer at the Electric Equipment Company, had told him, it was an entirely new design, in a double truck car, and he was afraid, I would have trouble with it, the idea of driving a double truck car, from one motor, was revolutionary, and he was afraid, I was making a mistake. The draftsman, at the Eagle Iron Works, had told him, it was a very foolish idea, and I should have known better, for it was impossible, and would cause me, a lot of trouble, and, eventually, I would have to install two motors. There was a third person, but he said, we had had some trouble, and he did not wish to stir up any old troubles. He might, just as well, have told me, who it was, for there only one Engineer in Town, I had had words with, and that, was the Western Electric man.

and I met him, on the street, a few days later, and he ~~XXXX~~, he offered me an apology, which I excepted.

I went to the Electric Equipment Company, and their Engineer met me, in the middle of the shop. The first thing he said was, what size hat do you wear, and insisted, that I go, with him, to the Globe Clothiers, and he bought me a fine stetson. He told me, he had not ventured to predict, the car would not work, all he had said was, it was an entirely new idea, and he was afraid I would have trouble, and added, he had no business to say that much, which was very true.

What the Eagle Iron Works man had said, would have been bad enough, coming from an enemy, but, coming from a man, whom I had made it possible, for him to hold his job, for the past two years, by doing the work for him, he was unable to do, made it much worse.

Bruce, was doing the drafting, on the shaver designs, for the Eagle, and there were two, long braces, that were at such an angle, he was unable to figure their lengths, or the angle of their fastenings. Each shaver, they put out, was a different height, former ones, making these angles, located at a different angle. and he would call on me.

I determined to wait, until he called me, and I did not have long to wait.

They had taken an order for a machine, to go to Ohio, and it was the tallest one yet. I went into the Office one day, on other business, and Ted told me, Bruce wanted to see me. I went up to his Office, and he met me, like a long lost Brother. I knew, he was in trouble, for the greeting was too exaggerated. He told me of the new machine, and said I would have to help him out.

Bruce, I said, you should have thought of that, before you tried your best, to injure me, in the eyes of my employer. You were talking of something, of which you knew nothing. All you knew was, the Street cars have two motors, and you thought you could show my employer what a fool I was. I am afraid, you will have to learn to do your own work, or get another sucker, for I am through.

My Son, inlaw, was erecting Engineer for the Eagle, and when the machine was shipped to Ohio, and he was sent there, he found, the braces mentioned, were no cut to length, nor bent, and drilled. He was compelled to hoist them into place, to get their length, take them to a shop, and have them cut, return them to the location, hoist them again,

to mark the holes, and cart them to the shop, again, to have them bent and drilled.

This was an expensive job, and must be reported to the home Office, and during the argument, Bruce lost his position.

I found out, early in my career, it is much better to keep ones nose out of other peoples affairs. Even, when one is ask for advice, one must be absolutely sure, he is right, before giving it, for if he should be wrong, he will be blamed for any thing that might go against the person, to whom it was given.

The dry-pan feeders I had made at the Globe Machinery Company, were a new idea, and I neglected to pick up the blue prints, after they were completed.

There was a Brick and Tile Factory, at Shady Oak, near Ft. Dodge, owned by Snurr Brothers. They had two kinds of shale, that must be mixed together, to produce the best results, and a pair of my feeders would do that job, to perfection, So, the first time I was in Ft. Dodge, I called at their Office, and endeavored to sell Mr. Snurr, on the idea, but he could see no advantage in them, and would not buy. I hapened to be in Shady Oak, some time later, and discovered there were two of my feeders, at work, there.

I said nothing about it, until I had visited the Globe Machinery, and talked with their Superintendant. I ask him if he had made them, and he said he did, and that they were very well pleased with them. Yes, I said, that is why I am here, I want to pick up the prints, before some one else steals a patern from them. George, was quite put out, over the deal, he said, Snurr had told him, they had your permission, to use the prints, that he did not ask, to see their athority, because, ha had always considered Mr. Snurr, a Gentleman. I picked up the drawings, and took them home.

I went to Ft. Dodge, soon after that, and called at the Snurr Office, and presented them with a bill, for \$100.00, for the use of drawings, to have two feeders built, over them. Mr. Snurr told me, if I thought I could collect that, I was crazy, but I told him, I would be in Town, for the next two hours, and before I left, I would call again. My advice, Mr. Snurr, is to see wour Attorney, before making a decission. Just tell him the truth, nothing more. When I returned, Mr. Snurr was not there, but thers was a check waiting for me.

Mr. Goodwin loaned me to a firm, who had erected a Brick and Tile Factory, in Brownsville Texas, that was not doing so good, and they shipped me, down there, to see if I could be of any help. It was the same old story. A shale working Factory, had been purchased, in the north, and shipped down there, and erected on a surface clay deposit. A northern Engineer, Claud Smith, had built the plant, and pulled out, when he found he had produced a failure. I immediately told them, to forget their drying tunnels, and build a dry house on the foundation, but they did not wish to spend any more money. So, I told them I had just as well go back home. But they begged me to stay, the three Months I had been loaned for, and maybe, I could help a little, by rebuilding the tunnels. I am afraid, that was one time, I did not follow my judgment,; It was a pleasant place, just across the River from Old Mexico, and I was feeling so much better, physically, than I had been, I let these facts warp my judgment, and stayed. I did, help them, to a great extent, but it was not a success, and never would be.

When I left, they were saving about 80 percent of their ware.

When I returned home, I met my Doctor, one day, and he seemed to be surprised at me looking so well. He said he never saw me looking as well, and I had better get myself a job, in Texas, and move there.

In less than a Month, after I returned, I was in the Hospital, for an emergency operation, for a ruptured stomach.

While doing some repair work, at Redfield, I was taken with severe pains, in the stomach, I went to the Hotel for lunch, and ordered a glass of milk, and a raw egg, nothing more. I was supposed to go back to the plant, but instead, I got into my car, and headed for Des Moines, and home. I had some trouble with my car, on the way home, and left it in a garage, down Town, for a check up, and took a Street car home. My Wife was ill, at the time, and my Cousin was keeping house for us. She gave me a dose of bicarbonate of soda, and it eased the pain, to some extent, and I slept a little, that night, but, the next morning, I was again, in great pain.

I kept some guinea pigs, as a hobby, and went into the basement of the garage, to tend to them. I had cleaned one hutch, and closed the door, when something struck me. I actually thought I had been shot, and looked around, to see where it had come from, of

course, there was no one there. I had gone down, when it had struck me, but I finally got to my feet, and into the house. As I passed my Wifes bed room, she called to me, saying she was cold, and wanted me to fix the fire. I went back into the basement, and stoked the furnice, and back, up stairs. When I got back into the house, I was in very bad shape, but stagered into my room, and fell on the bed.

I heard Mary call my Daughter Hattie, and tell her to get a Doctor, as soon as possible, for I think your Father is dying.

She called my regular Doctor, but he was just going into an operation, and could not come. Then, she called Dr. Kelley, but he was tied up, with a patient, and sent an under-study. When he came, he gave me a shot in the arm, watched me, for a few moments, gave me another, and went to the telephone. When he came back, he told me he had called an ambulance, to take me to the Hospital. I ask him, what Hospital? and he said, the Methodest. I ask, why not the Mercy, and he said, there were two reasons, the Methodest was two blocks closer, and Dr. Kelley was there, waiting for me.

When I arived, the little white wagon was waiting for me, and they wheeled me to the operating room, where, the Doctor was awaiting my arival. Dr. Kelley, told me he was saving two out of five, that were in my condition, and wanted to know if my business, was in a condition, for me to leave it?. I told him, I was going to be one of the two, and for him to get busy, and get it over with, and while you have me down, fix that rupture.

I do not thing, it will be necessary to say, the operation was a success, but it came very near not being.

My Wife, passed away, while I was in the Hospital, and they kept her in the Morgue, several days, waiting for me to join her. They finally burried her in the beautifull cemetary, in Beman Iowa, beside my dear Mother.

One year from the time I had finished the re-construction of the Redfield plant, I was invited to attend a dinner, given every year, following the anual, stock holders meeting. I was told, they had just, declaired a dividend, of 20%. I remarken, if they kept that, up, they could soon recover the Money I had squandered, this brought a great laugh, and I ask for information, as to what caused the levity, and was told, the cost of reconstruction, had been paid, before the dividend had been declaird.

I had returned to work for the the Goodwin people, but my health was not good, The work was not hard on me, and I was unable to take on, any large Engineering project.

About a year, after I had left the Hospital, I wrote to a very nice Lady, I had met, while in Brownsville, and after quite a long correspondance, perswaded her to become Mrs. Thorpe. On the twenty ninth day of July, 1926, we were married.

My Wife, had a Son, John, whom I adopted, and am now living with.

My health was getting no better, and we decided to take the Doctors advice, and move to Texas. It was a bitter pill, for me to swallow. My reputation, was established, in the north, through all the years of hard work, and equally hard, study. There were no industries in the south, at that time, but my Wife said, my health was of more importance than my business prospects. I think she was just a little home sick, any way, for mamma and Brownsville.

So, we moved to Brownsville Texas, at the rower end of the Rio Grande Valley. There was an electric power plant at San Benito, just a fiew miles from Brownsville, and they were installing another unit. I obtained work there, for a while, helping install the machinery. After we had finished that work, Mr. Miner (the Engineer in charge) ask me to make a set of drawings of the steel frame work of the building.

It had been a sugar mill, and the original drawings had been lost. After I had finished that job, there was nothing else for me to do, and I could see, I must create my own job, as in the days of yore. I thought I could see an opening for a machine shop, in Brownsville, and aranged for a building to be erected, at a place, on I thought would be a good location, equipped it with the necessary machinery, and opened it, for business. I had a partner in this venture, who had a Son, that was supposed to be an expert welder, but said Son, proved to be, no welder at all, and after a fiew trials, gave it up, and left. Business was very slow, for a while, and my partner, also got sick of it, and quit. I hung on, and did the best I could, for the fiew customers that did, come, and soon had enough business, so I was compelled to hire halp. I hired a Mexican fellow, who claimed to be a machinest, but I had to train him, for some time, before he could do the work, up to my standards. He lived in Matamoros Mexico, just across the River from Brownsville, and was the cause of me getting quite a lot of work, from there.

His name, was Pablo Ramos, . Pablo, was with me for a long time.

This was the time for me to celebrate. My Wife presented me with a fine Son. We named him, Clyde Thomas. He was a healthy little fellow, and sure, was welcome. He now lives in Wilmington North Carolina, having moved there, from New Orleans, in September, and is on the staff of the Wilmington Morning Star. He has a little boy, of his own, now, and they named him Clyde Thomas II, which pleased me, very much. Thomas and Val, have two little girls, that were Vals, by a former Marriage, which Thomas adopted. more about he and John, later.

There was a great amount of ornamental iron work, being used in the Valley, as well as in old Mexico. The Mexican Mechanics, are tops, in that line. This is a big business, in old Mexico. I studied it, even went to Monteray, where there is some of the finest examples of that art, I have ever seen. I saw some of their work, at a bank entrance, I do not know, how it was done. It consisted of four bars of one inch square, steel, braided into a perfect, four stran braid, used for a column., and was made before the arival of the acetyline torch, so, must have been made in a blacksmiths forge.

I proceeded to equip my shop, with the necessary machinery, most of which, I made, and made a bid for that class of work. My work, made a hit, and I had all I could do, for some time. In fact, until the depression of 1930 came, which stoppen most of the building, and ornamental iron work, depents, entirely, on the building industry.

There were some comical incedents, connected with that work.

A Carpentering firm, were building a home, a short way from Brownsville, which had a side entrance, with a small portico, in front of the door, and the owner, wanted a railing on either side. The Carpenter ask me to make a sketch of something, I thought would be appropriate for the place, and he would show it to the owner. I went to the place, to gat an idea, and made a pencil sketch. When the owner saw it, he was not pleasured, and sent it back. I knew, it was the right thing for the place, and that he would like it, after it were installed. so, I inked, the same drawing, and sent it back. This time, it was just what he wanted, and I made it.

Another time, I went to a home that was being built by a clothing Merchant, and noticed, the part of the front porch was being partitioned off, and learned, it was to be used as a conservatory, and that there was to be no partition between it, and the living room. It was an ideal place, for a small colonade, on either side, with double, swinging gates in the center. I went back to the Office, and made a drawing of the proposed project, and showed it to the owner. He could not see any thing beautiful, about it, and did not want it. The next day, I was at the same place, on other business, and the Merchants Wife was there. It seems, the Carpenters had told her of the drawing, and she ask, to see it. I went back to the Office, and got it. She was very much pleased with it, and the next day, Mr. Aziz called me, and wanted to know, how much, that darned gate would cost him, and remarked, he thought I was a pretty good salesman, but did not like my tactics. I told him what the price would be, and he said he was compelled to order it.

I finished the piece, after house had been finished, in fact, the family had moved in, before I could install it.

I went there, shortly after lunch time, and Mr. Aziz was at home. He and his Wife, sat there, and watched me install it, neither of them saying a word. I could see, there was a difference of opinion, and all I could do, was to hope for the best. After it was done, Mr. Aziz, got up, and walked through them, turned, and watched them close, walked through again, and a large smile spread over his face. He told his Wife, you win, I really think they are beautiful, and I would not have them removed, for ten times what they cost, but, he could not see their beauty, until they were installed, and working. Mrs. Aziz, was very much pleased with the final decision. She told me, he had fought the idea, from the start,

I designed and build turbin pumps, which were very desirable, for pumping irrigation water from resacas, of which there are many, there. I also manufactured irrigation pipe and foot valves, in fact, irrigation supplies of all kinds. I operated this shop, for 26 years, finally selling, to the Brownsville Caster Bean Company, who were preparing to cultivate caster beans, and extract the oil from them. My main reason for selling, was the fact, I was badly hurt, while erecting a radio tower, for the Brownsville, broadcasting Company, when a dope fiend, removed a safty bolt, causing the tower to fall

with me, crushing my right ankle.

The Caster Bean Company, was an uncertain concern, owned by, Mr. Arthor Davis, of the Aluminum Company of America, and managed by a Mr. Van Over, a would be chemist, who was very uncertain, in his ideas. There was one thing he could do, to perfection, and that was to spend Mr. Davises money, which seemed to be alright with Mr. Davis.

He had some of the craziest ideas, I ever heard of. He was a nut, for buying old machinery, and endeavoring to repair it. He did not last long, however, being replaced by a Mr. Mc Cuen, a drunken Lawyer from Washington D.C., who had no, crazy ideas, in fact, he had none at all, except for the consumption of hard liquor.

When Mr. Van Over bought my shop, he said, the price is alright, if you come, with it, but if you dont, I dont want it.

After I went with them, they moved their plant, and were putting up new buildings. I designed, and supervised the construction of two, large buildings, that were constructed, entirely of two inch pipe, for the frame work, sided and roofed with corrugated asbestos sheets. All the pipe, was cut to correct angles, and milled to an exact fit, and electric welded. One, was for a manufactureing building, with shop Offices, and the other, for caster bean storage, and a room for the extracting machinery.

Mr. Mc Cuen ask me to manufacture something, that could be readily sold. The idea of this, was to have something for the men to do, while waiting for the bean business to materialize. This was the first thing he had suggested, that had merit.

The only thing I knew of, that could be sold, "locally" with any assurance, was irrigation equipment. There was always a market, for pumps and pipe, if they were dependable. I knew, very well, the farmers would be pleased with a pump, they could move from place to place, without the use of a derick. One that could be installed along the bank of the River, and moved, after that particular piece of land had been irrigated. for, the Rio Grande, is subject to flash floods, that cut into the bank, where that bank has been dug into, and if the pump is left there, when one of these floods comes, it will be washed away, and lost. The heavy, cast iron pumps, are hard to move, especialy, when they have been set on a shelf, dug into the side of the bank, to get them near enough to the water, to operate successfully. With this in mind, I designed a steel pump, that could

be handled by two or three men. I designed two sizes, a six inch, and an eight inch, which were the sizes mostly used in that section. The sale of pumps, creates a market for pipe, and foot valves. While I was in my own shop, I discovered, that the spiral welded pipe, was the most rugged, and had designed a machine, for forming it. I had not used the machine long, when I received, notice, from the Illinois Steel Co. they had letters patent, on the design. I had never heard of it before, but I junked it, and designer another one, on a different pattern. The first one, formed the pipe, by forcing the sheets, inside of a cylinder, while the last one, formed it, by wrapping it around a collapsible form. The latter, was much faster, and easier to handle. This machine, had come with the shop, and was already to go.

I arranged the shop, for mass production of these articles, and started their manufacture.

Mr. Mc Cuen thought we should have a salesman, and hired a fellow, name, Dan Calvin, to sell them. He got out, advertising material, some of which, I still have. He ask me to build a demonstrating unit, so I made a portable outfit, consisting of a six inch pump, powered by a V8, Ford engine, direct connected to the pump,; The whole outfit, was mounted on an automobile chases, that he could trail behind his car. It was tested out, at the plant, very successfully.

All of this time, we were piling up, pumps and pipe. I have heard it said, a man must know his product, before he may become an efficient salesman. Dan, did not know the first thing in the world, about pumps, pipe, foot valves, nor, for that matter, irrigation.

This was during world war two, and I had some trouble getting priorities. I make three trips to San Antonio, trying to convince the Board, that irrigation pumps, were essential to the war effort, and went to the mat with them, several times. If farm products are not essential, what in this world, is?.

On my third trip, I ask one of the fellows, if there was any one in the Office, that knew any thing about priorities, and he said, not that I know of, but followed that remark, by saying, if you will go Alemo Iron Works, and contact their priority man, he can give you some pointers. I went there, and discovered their priority man, was a fellow

I had known in Brownsville. He produced a blank priority request, filled in a few places, ask me a few questions, and told me to take it to a certain man, at the priority Office. I contact the gentleman he had mentioned, and was informed, that was all I needed, except, they would require nine copies of the original request. I went to a public stenographer and had the nine copies made, handed them to the proper Official, and I was all set, for all the materials I might need.

Three weeks from the time, Dan had started his sales campaign, I had sold, and delivered two pumps, to patrons who had come to the Factory, to buy them, together, with pipe elbows and foot valves, I had sold, and delivered five thousand feet of six inch, spiral-welded pipe, the latter, to one man. Dan had sold nothing.

I suggested to Mr. Mc Cuen, he get another salesman, and he was very much put out, over the suggestion. He told me, may be I thought I could do better. I told him there was no doubt about that; It did not require a salesman, just some one to show the pumps to the proper persons, and they would sell themselves. People do not know, there is such a thing as a light weight pump on the market, and Dan's main job, is to broadcast that information. I knew why he did not like to hear any thing against Dan,;

There was no liquor, on the U.S. side of the River, and it must be smuggled across, if one wanted it, and Dan was a past master at that.

The next day, Dan came to my Office, and we had quite a row, and when he went back to the main Office, Mc Cuen came out, and ordered the manufacture of pumps and pipe, discontinued, until some of them, were sold, and suggested I go up the Valley, and try my luck, at that job, if I thought it were so easy. I would find, the farmers, don't want them. I went out the next day, and came back that evening, with orders for three pumps, and all the extras, that go with them. I was to stay at the Office, the next day, and make the deliveries, as each of my customers, were to come to the plant, to get them. so I stayed at the Office, made all the deliveries, and received the cash, for it all.

Ten days from the time I started selling, we were out of pumps, and almost out of pipe. I had even, sold the demonstrating unit, to a farmer who came to my home, to see if it were for sale. I told him, it was, and the price, was \$700.00 cash. The only argument he put up was, when can I get it?, and I went to the Factory and helped him load it.

Mr. McCuen had installed Dan, in the Office, as head book keeper, where there were no books to keep, except the time, for my men, and that was handed in, each week, recorded in a standard time book. The farm Manager, kept his own books, and there was a lady Steno. in the office, with nothing to do, but write a few letters, each week, for Mac.

After the pumps were all sold, Dan, informed Mr. Mc Cien, he had discovered, I was operating at a loss, and demanded my books, to prove it.

My books showed every purchas, and every item of expense of the shop, including the efforts Dan had made, in the selling (if he made any). My salary was included, and I did a great amount of work, outside the Factory, for the farm Manager.

This record is considered excellent, if a new business is started, as a new business often operates at a loss, the first six Months.

When my books came back; Dan did not bring them, but sent the Office girl out with them, and I think it was a wise thing for him to do, for if he had brought them, some one would have been hurt. Every page in my books, was scratched over, with a soft lead pencil. No one could see, what had been in them. If I ever had an inclination to murder, it was then. I suppose I should have sent them to Mr. Davis, which would have started an investigation of the whole affair, but I was so disgusted with the drunken outfit, I thought it would be better, if I left them to their own devices, before there was some trouble, that would be hard to explain in Court. There was no use trying to operate a business, under such conditions. I knew I was manufactureing an article there was a great demand for, and at a profit, 30 %. But, this was just a little too much, and I handed in, my recognition. The works, closed down, and the last I heard of Mr. Mc Cuen, he had gone back to Washington. Dan had perloined enough, from Mac, to buy a resort, Hotel, in Port Isable. Had gone broke within three Months, and left the country, leaving his Wife, behind. She told me, she had not the slightest idea, where he was.

And, that was the end of a profitable business, which went to the dogs, because of dishonesty, greed, and rot-gut whiskey. A business that was very much needed at the time.

I had intended to retire, but when I went to the junior College, to start Thomas, in that institution, the Dean saw me, and ask me to come to the Office, with him.

They were starting a veterans trade School, and wanted me to teach the Mechanical Engineering class. I had taught a night class, at the college, and was acquainted with most of the Faculty. They were erecting a new building, for the venture, that would be finished, within a Month, and were getting the necessary machinery, from the Government.

I excepted their offer, and instead of retiring, I was back in the harness.

When I first started, there were only two students, and the new building, not being completed, I held classes in the main building.

By the time the new building was completed, there were 32, in my class, they ranged, from second graders, to College graduates. We did our practice work, such as learning to handle the various machines, Electric, and acetyline welding, and bench work, in the new building, taking the class to the main building, for a two hour session, in drafting, and trigonometry.

It was interesting work, and I liked it, very much. It was gratifying to note, how eager they were to learn. Most of them had been over seas, and knew the hard knocks they would encounter, when they faced the competition of the world. I had two, in my class, that were enclined to make trouble, but I soon got rid of them, by sending them to the Dean, with a sealed note, telling of their actions, but recommending leniency. I never saw either of them, again.

After Thomas finished the two years, in junior College, we were taking both of the boys to College, and they had decided on Loyola University of the South, at New Orleans, and I was compelled to resign my position, at the Veterans School, and we all moved to the Crescent City.

My Wife had suffered a stroke, a year before we left Brownsville, and had partially recovered, but was not able to do any house work, so I took over that job, to the best of my ability, for we all, knew, Mother should do no more than necessary, but no one, could keep her quiet, very long at a time. Her Brother, lived with us, and he was in a very bad physical condition, requiring much care, and Mother thought, no one could do it, but she.

The boys took their Mother out in the car, a great deal, which seemed to quiet her nerves, to a great extent, but she did more than she should have.

We sent her Brother to the Hospital, where he passed away, and we did not dare to tell Mother about it. We made regular trips to the Hospital, the boys going in, making believe they were visiting Osker, and when they would come out, they would give their Mother a routine report ~~to Mother~~ of his supposed condition.

Mother suffered another stroke, from which she never recovered, but lingered on, suffering greatly, with the nervous condition. Naturely, we did every thing possible, but really, there was not much we could do, except give her the loving care she deserved.

The night of March the fourth, 1952, after being very restless, during the day, and fore part of the night, finally told me, she believed she could go to sleep, if I would help her turn. She was quiet, for a long time, and being very tired, I dropped off, to sleep. When I awoke, I found that our Dear Wife, and Mother, had passed away, in her sleep. It was a great shock, notwithstanding the fact, we were expecting it.

We would miss her very much, but I think I am the one who missed her most, and still do. The boys are young, and must have other interests in life, to claim their attention. Their lives are ahead of them, while my own, is in the past. but, there is one thought, that penetrates the gloom, her suffering is over; That is life, and we must take the bitter with the sweet.

The boys finished their School, both of them graduating, with Honors. I kept house for them, until John married.

They entered the motion picture business, and I did the Office work for them, until Thomas entered the service of the New Orleans Item, and moved to himself, after which, John and I, operated the business, me doing the developing, and keeping the books.

When they sold the business, I had nothing to do, and being tired of living alone, and, with their consent, moved in, with John and Aline, where I still am.

John and Aline, have a little girl, who is, just past two, and a little boy, who will be one year old, in November of this year (1958).

Ann and David, are a great comfort to me, and I love them, very much.

Thomas is married, and is no longer, with the Item, that paper having terminated

its publication, and he excepted a position, with the Wilmington Morning Star, in Wilmington North Carolina, and moved his Family there, the fifteenth of September.

Thomas merried a young Widow, who had two little girls, whom he adopted, and now, they have a little boy, who was born, a year ago, last August the 23rd. He is a healthy little fellow, and they named him, Clyde Thomas II, which pleased me very much. *Val had 2 girls*
I did not get to see them, as much as I would have liked, when they lived in Slidel, and now that they have moved so far away, I do not suppose I will see them for a much longer time. I am happy to know, they are, both happily married.

John, is teaching, at the Delgado Trade School, and doing special, Televission work, for an advertising firm. While I have nothing to do, but sit here and write about my past life, for those who will, to read.

I have left out, many things that have happened in my past life, thinking they would not be interesting, to my readers, nor important, as a matter of history. I have endeversd to chronical the more important things, as they appeal to me. I believe I have lived through the most important, and interesting period in History, masured by the progress of the human race.

This has surley been the Machine age. What the future holds, is the concern of those who will live, in that future. We have done our best, to leave a foundation, for them to build on.

When I started life, the only way of creating artificial light, was by the use of the tallow candle, or the wick lamp, that burned whale oil. This lamp, was a dish, something like a gravy boat, with a wick protruding from the spout, and lighted at the end. This gave a better light than the candle, but must be extinguished, before the oil was all burned, or it would stink, something awfull. When it was to be extinguished, it must be pinched out, like snuffing out a candle, to keep it from smoking.

I have molded many tallow candles, using a six place mold. Placing the candle wick, through the mold, heating the tallow, and pouring it into the molds, and after it was cold, dip it into hot water, so the candles would slip out. There were no kerocine lamps, until I was none or ten years old, for petrolium had not been discovered, until recently, and the fefining process had not been perfected.

While steam had been known as a power producer, for some time, it was not in general use, except for a pumping engine, or an occasional, steam boat. They were operated at such low steam pressure, that it required a mammoth machine, to produce a small amount of power, and for that reason, they were not easily portable. Of course, wind, has been used for power, since pre-historic times, but it is not very well adapted for general use. The only power that was portable, was animal power.

Water power was used for sawing lumber, and grinding grain into feed or flour. This power was ideal for sawing lumber, for it could be located, down stream from the natural forests, and the logs floated down the stream, and recovered at the saw mill.

The first threshing machine I knew of, was called the separator, which was an improvement, on the old chaff piler, which consisted of a cylinder, with teeth, passing between other teeth, arranged in a concave, the threshed straw, chaff and grain, being thrown out, together, and separated, by forking it over a slatted floor. The separator attachment, did all this work, by power. This power being derived from several horses, hitched to a machine, called, the horse power, where the horses were hitched to a system of aways, and traveling around and around, transmitting their power, through a system of gears.

In my youth, the harvesting of grain, was accomplished by an attachment to the mowing machine, that held the grain, as it was cut, until there was enough to make a bundle, and was dropped where the man doing the binding, could pick it up. There must be, four men, following the drop-rake, for it must be bound and thrown out of the way, before the team came around again. This device was followed by the Harvesting machine, which cut the grain, and elevated it to a table, before two men, who were standing on a platform, attached to the machine. They would bind the grain, as it was elevated to them, and throw it off, and another man, following, would pick it up, and place it into shocks, so it would not be damaged by the weather.

Then, came the wire binder, which bound the grain, with wire. This, was short lived, for the small pieces of wire, left in the straw, killed many cattle. It was soon followed, by the twine binder, which was a success, from the start.

Shortly before my time, all harvesting had been done, with the cradle. There was an old cradle, around the place, when I was a boy, but I never saw it in use.

They were like a sythe, with fingers aranged, on the snath, to catch the grain, as it was cut, and carry it to the left, where it would be gathered up, by the binders.

Mother, had an old spinning wheel, also, but I never saw her use it.

Father told me, of harvesting grain with a cradle, for 25 cents per day, after the Cival war, working 12 to 13 hours per day.

The machine age, was just begining, at that time, and inventions came very rapidly, after that. It seemed, that one invention, gave some one an idea, for another.

At this time, the steam locomotive, had became quite a machine, and was soon to be dragging long trains, across the Contenent, in competition with the dusty freight wagons, over the Union Pacific Railway, west of the Missouri River, and pasinger trains, consisting of a bagage car, one or two pasinger cars, a Soldiers car, they being taken along, for a gard, and a car for the work crew. This was not a pleasant trip, but was far ahead of the old wagon train, with its Indian fights, and massacres.

These trains were quite a puzel to the Indians, until they discovered, the train could not run, without a track. They caused much trouble, after that. The passage could be made, in ten days, if there was not too much trouble. It sounds odd, now, but it was a great accomplishment, for that time.

I remember quite well, when there was a rail road built, from Gladbrook, to Liscomb, a distance of 20 miles. The Company ran out of money and credit, before they had bought steel rails, or a locomotive, so they layed wooden rails, and used horses, to pull the cars. There were no pasinger service, nothing but freight.

Later, they fastened steel strips onto the wooden rails, and obtained an old locomotive, and started a pasinger service, and did quite well, until one of the steel strips, came loose, and ran up, through one of the cars. There was no one hurt, for a wonder, but they could get no one to ride with them, after that, and finally, gave up, the whole venture.

I am not making light of these things, they were wonderfull, and most of all, they were the begining of biger and better things, to come.

When petrolium was discovered, it opened the way, to the greatest period of inventive progress, the world has ever knpwn. First, the way of lighting the night, by the use of

kerocene lamp. Do not laugh, it was wonderful. The idea of having a lamp, that would turn a whole room of darkness, into day light, was a pleasure to behold.

The steam engine, that had used nothing but tallow, to lubricate the inner parts of the engine, could now have a lubricant made from petroleum, that would stand so much more heat, the engines power could be tribbled, by higher steam pressure, and more speed. neither of these factors could be attained, when tallow was the only lubricant, for both high steam pressure, and high speed, mean more heat, and tallow became useless, as a lubricant, after the tempreture reached the point, of 400 degrees F.

As improvements were made in machinery, as well as the knowlege of refining the petroleum increased, there came the possibility of increasing speed, and pressure, until an engine that would develop twenty horsepower, was no larger than its predecessor, that could only develop a half horse power.

Other machinery, that had had nothing but vegetable oils for lubricant, could now, have one that would last ten times as long, would stand more heat and could be made the right consistency, to serve the differant types of machinery.

Flour mills, that could be located on some stream only, could now, be erected at any place that would be convenient for transportation, for the Corless engine had come, that, not only used the advantage of high steam pressure, but also used a condenser, that caused the machine to operate under a practical vacuum, thereby, taking advantage of the netural expansion of the steam, and would develop a great deal more power, with a given amount of fuel, than had ever been dreamed of being possible.

As refining technique advansed, gasoline was produced. First, as a by-product, and later, as the main product of the crude oil. This brought the gasoline engine.

Like most, new discoveries, they were very crude, at the begining. No electric spark, for ignition, but a hot tube, petruing through the wall of the cylinder, that must be heated with a torch, before attempting to start the machine, and after it became hot, if one had the luck to get the thing started, would stay hot, through the heat of the explosion. There were no timing devices on them, but the pressure, caused by the piston, would cause the mixture to explode. It was thought necessary, to have an expert, within call, at all times. One great disadvantage, was the very large size of the machines,

required to obtain the desired amount of power. Exactly the same trouble, as had been experienced with the first steam engines. But they were a start in the right direction, and improvements, were sure to follow. Better methods of cooling, better methods of ignition, better grades of gasoline and higher speeds, until the exceedingly high speed of the present machines was reached, and the Aero plane, and the automobile, were the results.

All of these wonderful things were bound to come, after the discovery of nature's great storehouse, of potential power, hidden below the surface of the earth.

This discovery, made possible, the development of the thousands of modern power plants, from your little lawn mower, to the monstrous diesel engines, that drive the wheels of progress, through the length and breadth of the world, and the end, is not yet, for now that men have discovered the atom, and the way to split it, who knows, what will be the result?. It seems, if the world will not explode, of its own devices, men, will endeavor to help that process along.

The latter sentence, is exactly the same remark, that was heard, at the beginning of every new discovery, and in my opinion, should be taken as false prophecy.

I have lived to see the passage from Europe to the western world, reduced in time, from, six to eight weeks, to as many hours, from the ox cart, to the hundred miles per hour (plus) automobile. From the sweltering heat, indoors, to the air conditioned domicile, that allows us to make the weather, as we wish it.

I believe, I have done my share of improvements, that were in line with my chosen profession.

Life, as a whole, has been good. Yes, I have had my troubles, but I know of many people who would have been glad, to have had as few. I have always enjoyed my work, and believe I chose the right profession, for me to have a happy life.

It has agreed with me, for I am exceptionally healthy, for my age, and still enjoy life, to the fullest. That is all there is, there may be more later, who knows.

P.S. This book was finished on October the twenty fifth, 1958.

I celebrated my ninth anniversary, the twenty seventh of last Month.

the end.

I WISH TO DEDICATE THIS ,
THE SEVENTH COPPY
OF MY LIFE STORY, TO MY
DEAR BROTHER, MR. U.B. THORPE.

Since I finished the book (this is my life) there have been many things happen that proved, this was not all, of my life; So I will endeavor to chronicle some of those happenings.

On the fifteenth of June, 1958, the Delgado group of the Golden Age Club, made a trip to Covington, for a picnic. I was a member of that group, and was Secretary of it; On the bus, going over, there was a Lady sitting across from me, alone. I was also alone, and the attendant noticed the situation and asked the Lady why she was not occupying the seat with that Gentleman? The Lady replied, she was not acquainted with him, and did not sit with strangers, but, the attendant said, this will not do, at all, and asked me what my name was, and when I told her, she literally, dragged the good Lady to my seat, and introduced us.

We spent the entire day, together, and when I left the bus, at the west end section, I told her, we will meet again, and got her address. I was going to write her, but unfortunately, I lost the address. Some time later, one of our mutual friends, gave a luncheon party, and invited both of us, Elda arrived at the party first, and when I arrived, she came to meet me, and (she tells me) I put my arm around her and gave her a loving kiss; I should have had my face slapped, for my familiarity, but Elda, did not seem to mind it at all.

Mrs. Elda Clegg, lived with one of her Grand Daughters, in Jackson Mississippi.

We corresponded for some time, and it seemed, we were very congenial, and when I proposed marriage, she accepted.

The Mississippi law, provides, there must be three days, after obtaining the license, and performing the marriage ceremony, but the good Judge, suspended the rules, and we were married, the same day, which was January the eighth, 1959.

That evening, I called my Club, and told them we would not be there, because we were so tired, but the Club President, said we must come, if we had to come in an ambulance, so we mustered enough courage to take a taxi, and go.

They had arranged a beautiful reception for us, with a lovely wedding cake, with all the trimmings, including a statue of the Bride and Groom, and we received the good wishes of the entire assembly. It was a great honor, and we were very much pleased.

The next Sunday, John and Aline (my Son and his Wife) ask us to attend a dinner, in honor, and there was a crowd there who gave us a lively reception.

We spent the next week, looking for a place to live, and finally found it, at 5380 Layrel Street.

There is a car port, beside the house, which is perfect, for a hobby shop, which I must have, for I must keep busy. I am making doll furniture, at the present time, for the Christmas trade.

Elda and I, have a lovely home, and neither of us would go back to single blessedness under and circumstances, for we are very happy, and nothing could part us but death.

We have had many honors bestowed on us, because of our advanced age.

We were asked to stand and be recognized before a congregation of more than a thousand people, at the first Baptist Church, and received a great ovation.

The New Orleans Recreation Department, sent a man, to take our pictures and they were published in the local paper, and we received copies of the original photo.

My birth day occurred, the 27th. of September (last Sunday) and our Minister recognized us, and announced to the congregation, that I was ninety one years old, but said nothing about Elda, who is only seventy six, and not old enough to be a curiosity.

The Scott group of the Golden Agers, ask us to attend their meeting, on Tuesday, last, and we received a big ovation from them, and the Delgado Group, who were in attendance, with the Scott group.

Maybe, we are foolish, but we like it, and I am of the opinion, that any one, would.

Clyde and Elda.

Mr. and Mrs. Shafer enjoyed five years of each other's companionship. She died at the age of 80 on Dec. 27, 1919. He lived to the ripe old age of 98 and died on 19 . They made their home in Kentwood La. for the last few years of their life. He continued with his wood working shop and she kept at home. They both served